



PKO Bank Hipoteczny

Issuer of Mortgage Covered Bonds in PKO BP Group

PKO Bank Hipoteczny
March, 2024

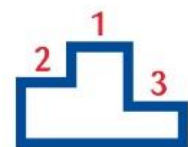
Key investment highlights of PKO Bank Hipoteczny



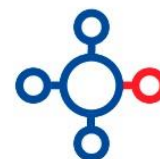
The biggest mortgage Bank in Poland
PLN 16.8 bn residential mortgages loan
portfolio in cover pool
(total cover pool: 16.9 bn) as of 31.12.2023



The highest net profit
in Bank's history
PLN 165,8 mn in 2023



The biggest covered bonds issuer in Poland
PLN 10.4 bn of outstanding
56.2% of market share as of 31.12.2023



Effective business model
synergies with its parent company PKO BP
- leader of Polish banking sector



Aa1 - Covered Bond rating
the highest achievable by Polish debt
securities



First issuer of EUR denominated
benchmark green covered bonds
out of Poland and Central & Eastern Europe



Strongly committed to ESG
with eligible portfolio of green assets



Green covered bonds
in line with ICMA and certified by Climate
Bonds Initiative

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Overview of the Polish economy

Macroeconomic and banking sector forecasts



Bank Polski

		2021	2022	2023E	2024F
GDP	% y/y	6.9	5.3	0.2	3.7
Consumption	% y/y	6.2	5.2	-1.0	3.6
Investments	% y/y	1.2	4.9	8.4	6.2
Fiscal balance ¹⁾	% GDP	-1.8	-3.7	-5.9	-5.6
Public debt ¹⁾	% GDP	53.6	49.3	50.3	53.3
Inflation CPI (av)	%	5.1	14.4	11.5	3.7
LFS unemployment rate (av)	%	3.4	2.9	2.8	2.7
NBP reference rate	% eop	1.75	6.75	5.75	5.25
WIBOR 3M	% eop	2.54	7.02	5.88	5.31
EUR/PLN	PLN eop	4.60	4.69	4.35	4.32
CHF/PLN	PLN eop	4.45	4.77	4.68	4.41

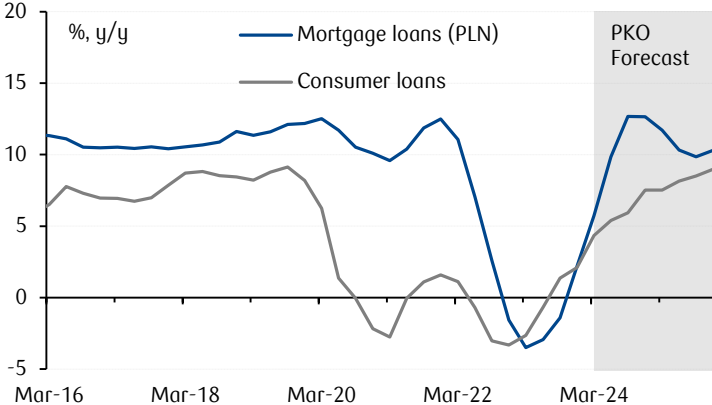
		2021	2022	2023	2024F
Loans total	% y/y	4.7	1.1	1.3	6.7
Mortgage loans PLN	% y/y	12.5	-1.6	2.2	12.6
New sales of mortgage loans	%, y/y	49.0	-43.6	20.2	41.6
Consumer loans	% y/y	1.6	-3.3	2.1	7.5
New sales of consumer loans	%, y/y	26.7	-1.0	18.4	9.3
Nonfinancial economic entities loans	% y/y	3.2	4.8	-1.5	4.3
Deposits total	% y/y	10.8	5.6	10.6	6.4
Deposits for private individuals	% y/y	6.0	4.1	12.3	7.1
Net assets of private individuals (TFI)	% y/y	8.0	-20.5	32.6	17.3
Nonfinancial economic entities deposits	% y/y	10.5	8.0	10.5	6.7

Loan and deposit market (FX adjusted)

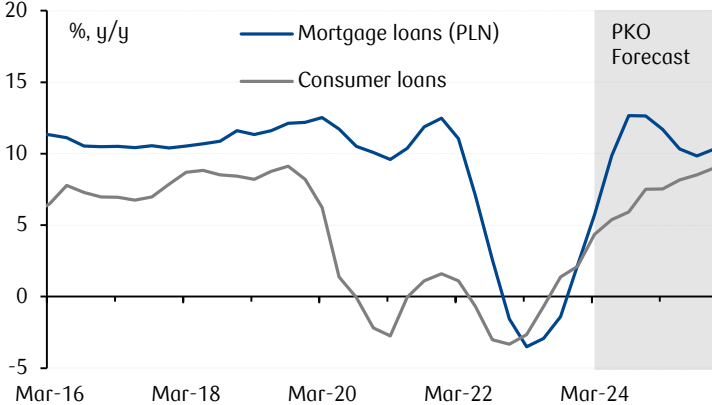


Bank Polski

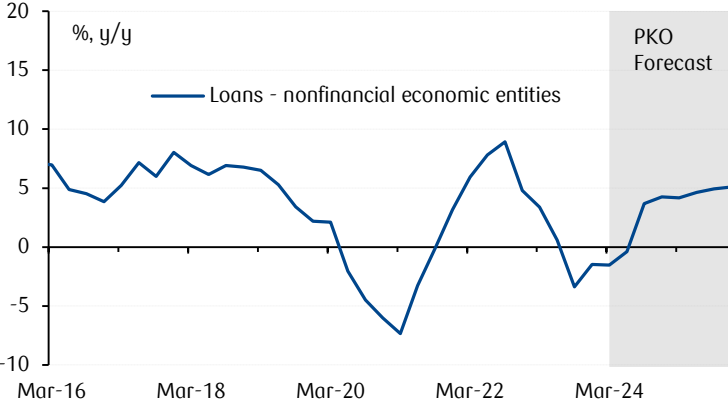
Mortgage and consumer loans



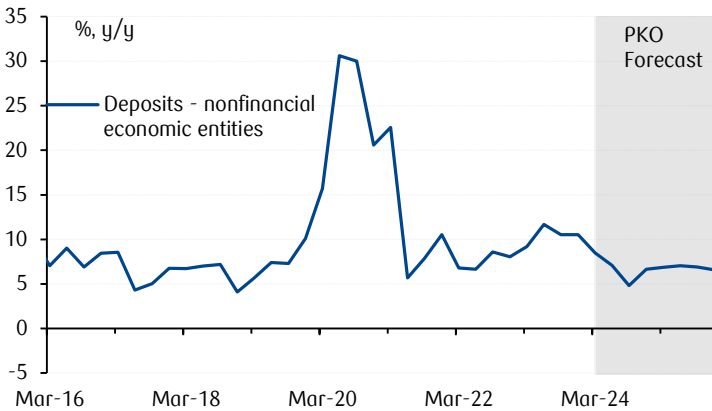
Private individuals' deposits and net assets (TFI)



Loans for nonfinancial economic entities



Deposits of nonfinancial economic entities

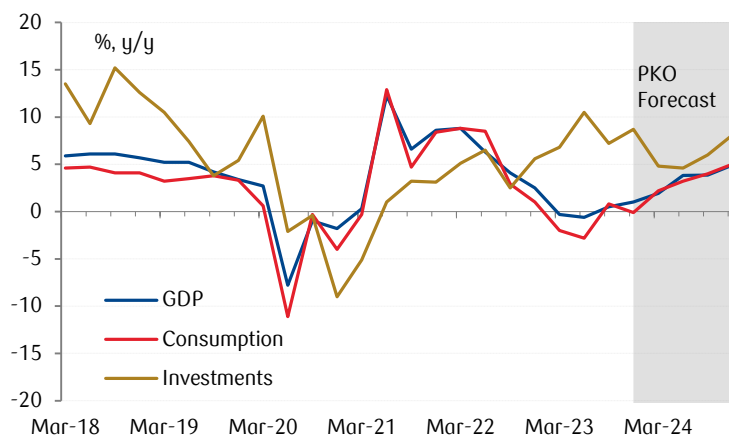


The economy is heading back to growth path



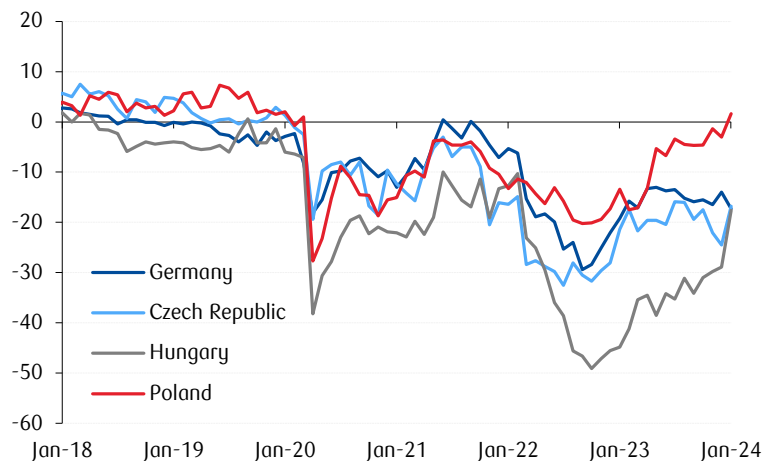
Bank Polski

GDP and its main components



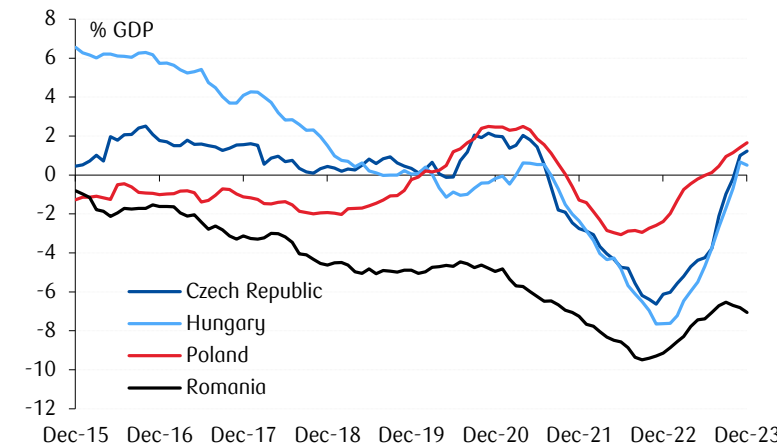
Source: Statistics Poland, PKO Bank Polski

Consumer sentiment (ESI)



Source: European Commission, PKO Bank Polski

Current account



Source: Statistics Poland, PKO Bank Polski

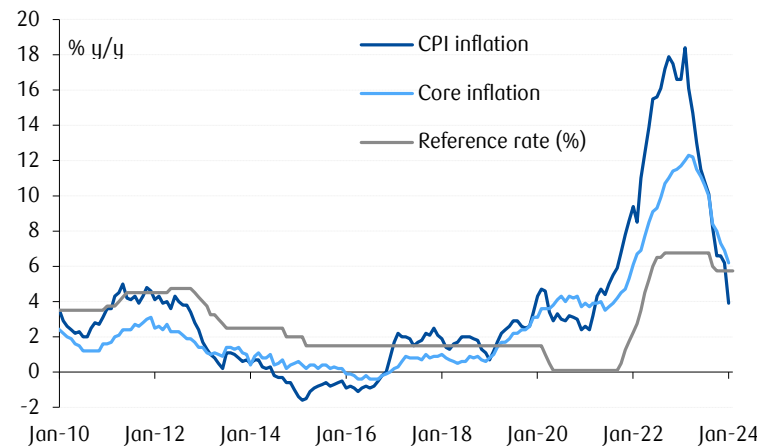
- **In 2023, economic growth was marginal, reaching only 0.2% compared to 5.3% in 2022.** Behind this result there are year-on-year declines in GDP in 1h23 and a gradual improvement in economic conditions in 2h23, with economic growth in 4q23 at 1.0% year-on-year. Both in the entire 2023 and in 4q23, investments stood out positively, growing at a rate of approximately 8%. The high investment activity reflected expenditures related to energy transition and automation, with a positive impact from the finalization of projects co-financed by the EU budget for the years 2014-2020.
- **The decline in inflation, combined with a robust labour market, brought real household incomes back to growth and led to a significant, the strongest in the region, improvement in consumer sentiment.** As a result, in 2h23, private consumption has stabilized, and during 2024, it will most likely become the main engine of economic growth. On Bank's expectations, GDP dynamics in 2024 will reach 3.7% and, alongside the recovery of consumption, it will be supported by investment growth (with the initial inflows from the RRF, Recovery and Resilience Facility) and positive net exports.
- **Poland's external balance is gradually improving.** Thanks to the resilience of exports to the global economic downturn and due to the swift reversal of the negative cost shock that inflated imports, the current account balance (12-month moving sum) became positive during 2023, reaching +1.6% of GDP at the end of the year.

Return to positive real interest rates and stabilization in public finances



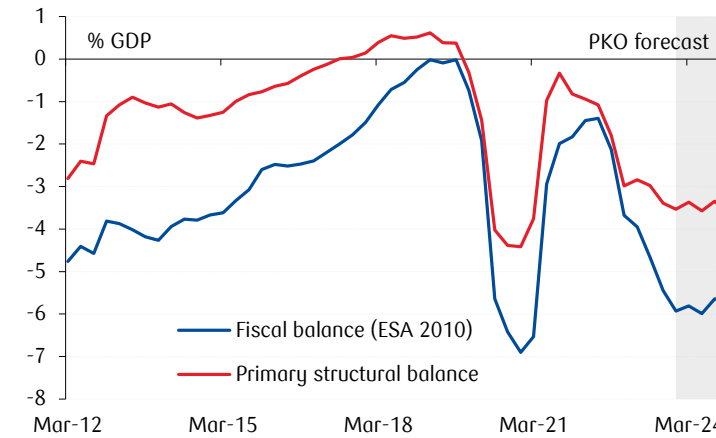
Bank Polski

CPI and core inflation vs. reference rate



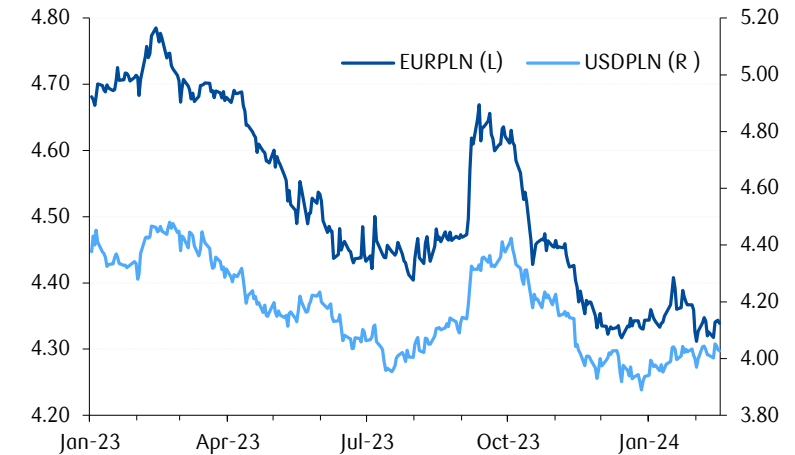
Source: Statistics Poland, NBP, PKO Bank Polski

General government sector



Source: Eurostat, PKO Bank Polski

PLN exchange rate



Source: Macrobond, PKO Bank Polski

- **In 2023, CPI inflation significantly decreased from 18.4% y/y at its peak in February to 6.2% by the end of the year.** Preliminary data indicate that a clear disinflationary trend persisted at the beginning of 2024, and by the end of 1q24, inflation will likely be close to the NBP target. The rapid disinflation process reflects the fading of initial shocks, weaker domestic demand, and the strengthening of the zloty. The prolonged anti-inflationary measures are also playing a significant role. The timing and extent of their withdrawal will determine the scale of inflation rebound in 2h24. The sustainable return to the NBP target is expected at the turn of 2025/26.
- **The costs of anti-inflationary shields, along with increased defence spending, have left their mark on public finances in 2023.** With the improved economic conditions and still relatively high inflation, the revenue side of the budget should improve. In the mid term the government has announced a gradual fiscal consolidation.
- **In response to strong disinflation, in September and October 2023, the MPC lowered NBP interest rates by a total of 100 bps. Currently, the Council does not rule out interest rate adjustments in either direction** and indicates that the most likely scenario for 2024 is their stabilization. Factors favouring a slight adjustment of interest rates in Poland would include i.a. the extension of anti-inflation shields, the beginning of interest rate cuts by the Fed and ECB, continued interest rate cuts by banks in the region, and the zloty appreciation.
- **In 4q23 the zloty strengthened significantly** reacting, among other factors, to the cessation of NBP interest rate cuts, higher likelihood of inflow of funds from the RRF, and favourable global conditions.

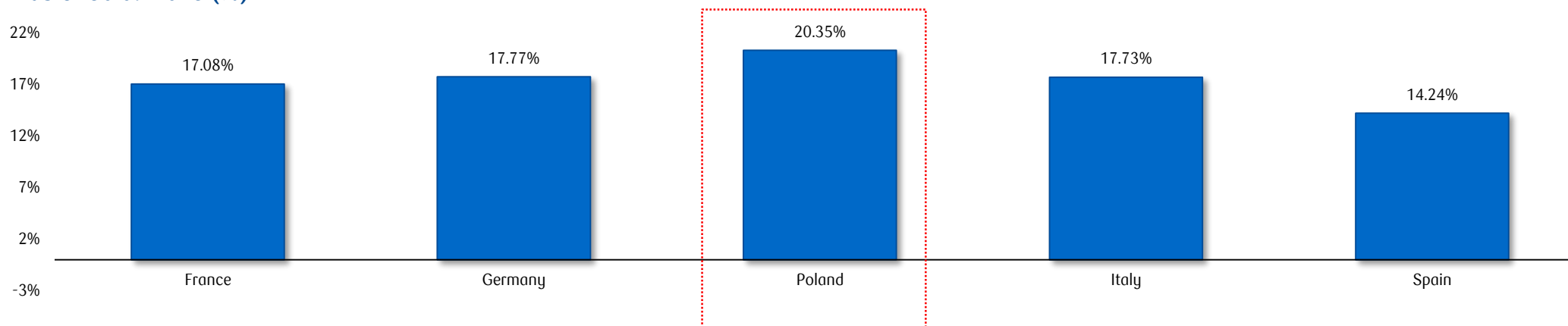


Polish banking sector

Polish banking sector



Tier 1 as of 30.09.2023 (%)



Source: ECB, KNF

KPIs of the Polish banking sector as of 31.12.2023

KPIs	Banking sector
TCR	22.03%*
ROE	12.91 %
ROA	0.97%
C/I	46.82%
Total Stage 3 ratio	5.0%
Stage 3 ratio (mortgage loans only)	2.2%

Source: KNF, BFG
* As at 30.09.2023

Key market parameters

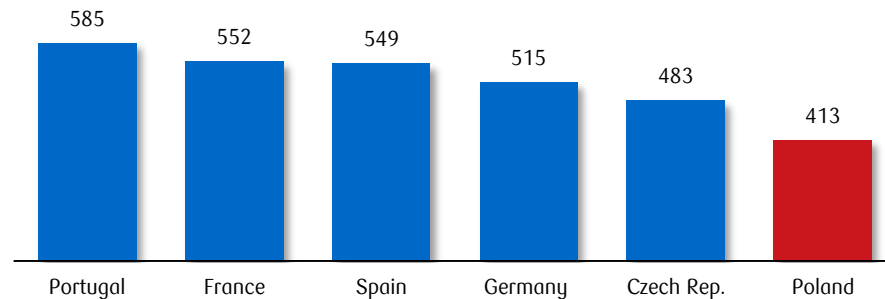
	31.12.2019	31.12.2020	31.12.2021	30.12.2022	29.12.2023
%					
WIBOR 3M	1.72%	0.21%	2.54%	7.02%	5.88%
€/PLN	4.26	4.61	4.60	4.69	4.35

Source: GPW Benchmark, NBP

Polish property market and residential mortgage lending

Polish residential market - considerable development potential

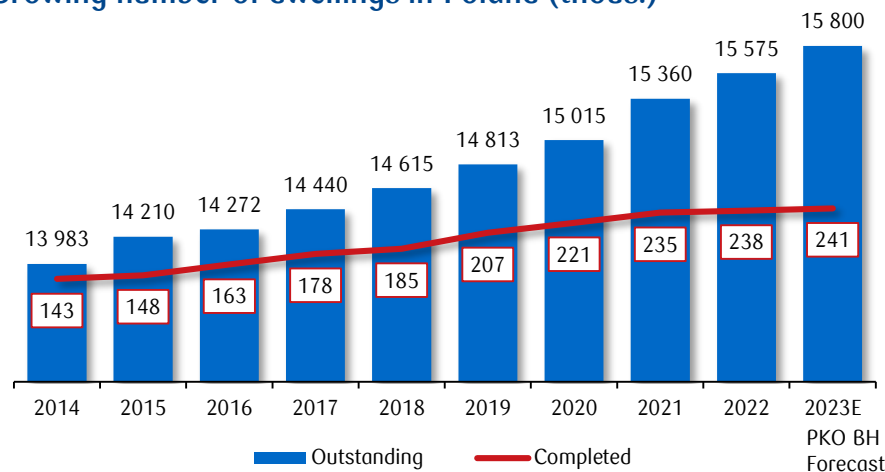
Dwellings per 1,000 inhabitants in selected EU countries for 2022



Source: Deloitte Property Index report published in September 2023

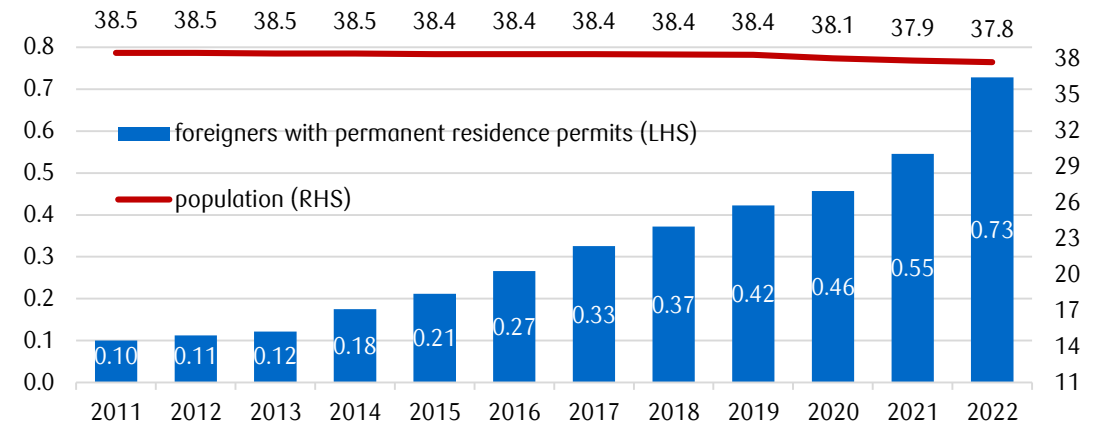
- Relatively low number of dwellings per ths. inhabitants comparing to EU countries
- Constantly growing number of completed and outstanding dwellings
- Number of construction projects decreased in 2022-2023 (by app. 30%) but it returned to growth in H2 2023.
- Polish ownership rates are among the highest in the EU
- The housing shortage in Poland is estimated at about 1 million apartments
- The negative impact of long-term demographic changes is reduced by the inflow of immigrants (permanent residence permits increased by 628 ths since 2011)

Growing number of dwellings in Poland (thous.)



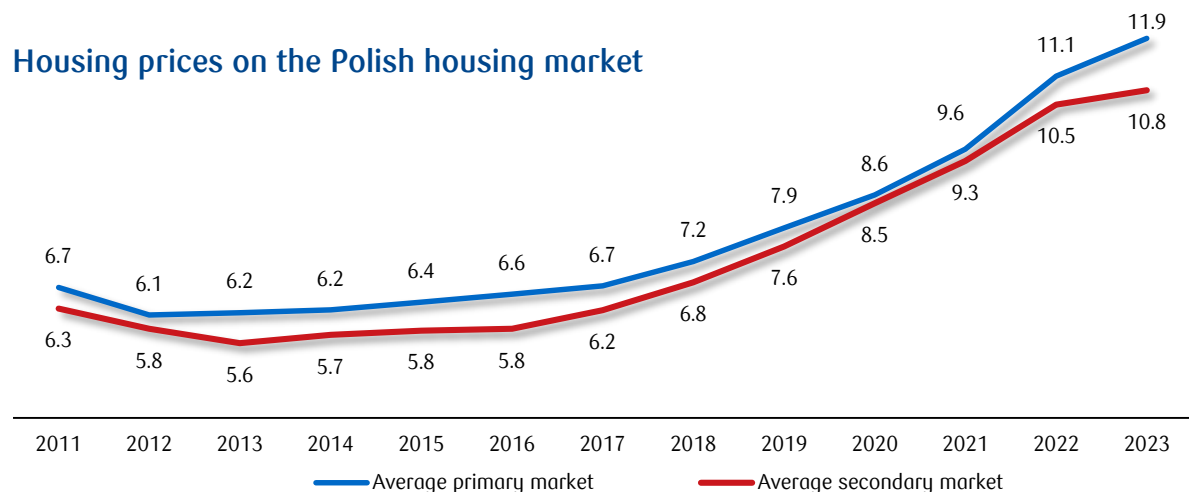
Source: Statistics Poland (GUS)

Long term demographic changes



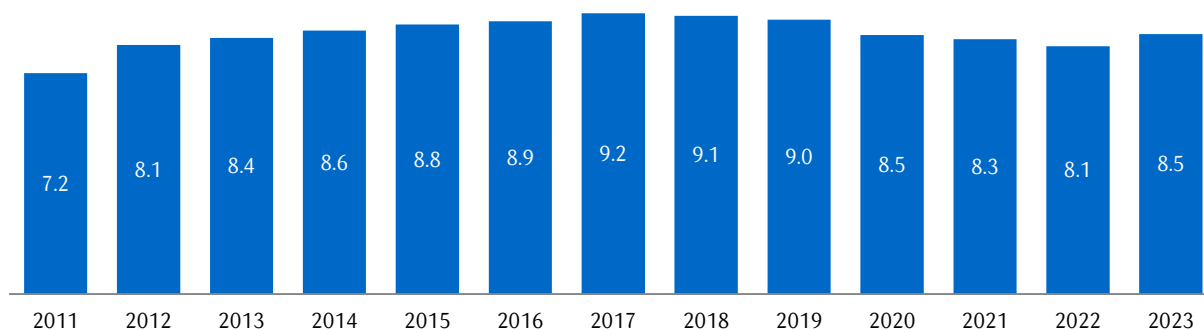
Rising housing prices on the Polish housing market persist

Housing prices on the Polish housing market



Source: PKO BH calculation based on NBP and Statistics Poland (GUS) data

Affordability on primary market (transaction prices (PLN ths/sqm) vs average annual salary)



Source: PKO BH calculation based on NBP and Statistics Poland (GUS) data

Primary market

- ~10% p.a. of average price growth between 2018 and 2022
- Dynamic price growth (~7.6%) in 2H 2023 – due to a sudden increase in demand after the program of preferential loans was launched
- Affordability improved in 2023, after 4 years of slight decrease (due to lower dynamic of prices growth in H1 2023).

Secondary market

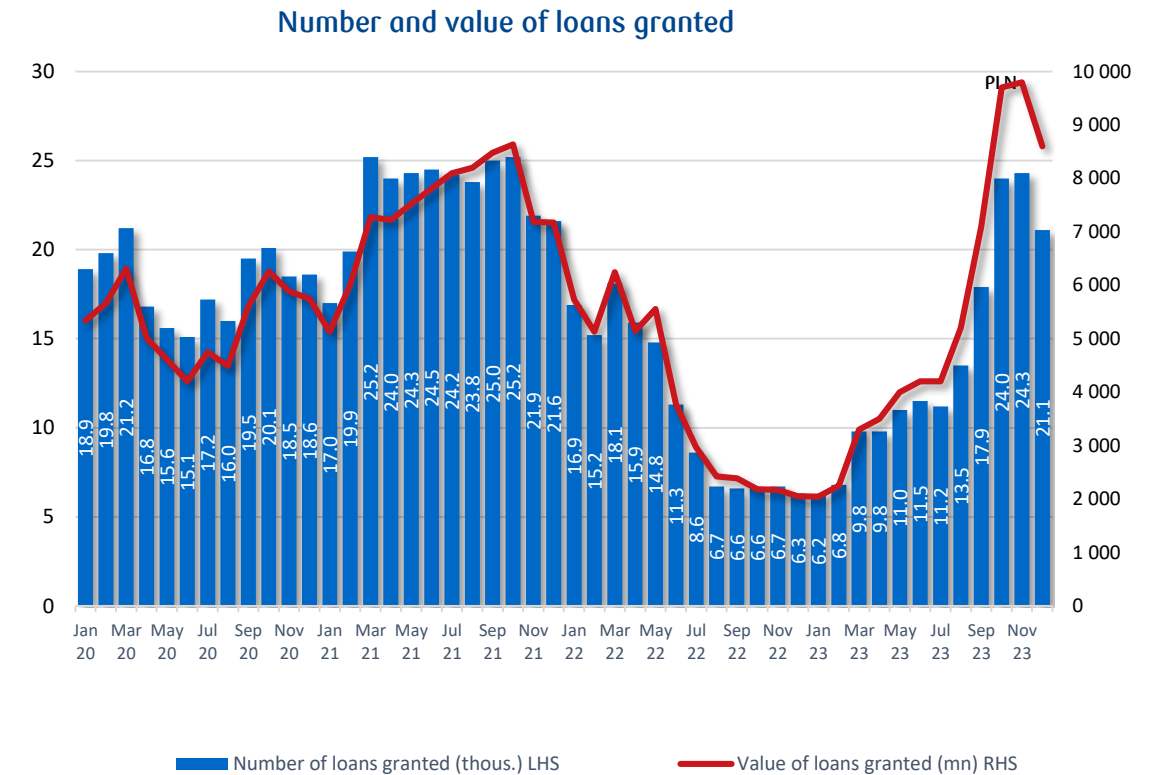
- 5-10% lower house prices compared to primary market
- ~10% p.a. of average price growth between 2018 and 2022
- Dynamic price growth (~10.5%) in 2H 2023 – due to a sudden increase in demand after the program of preferential loans was launched and shortage of supply on the primary market

Real estate prices

- Slight upward trend in H1 2023 and a significant increase in dynamics in H2 2023
- Expected lowering the price growth rate in H1 2024 due to the ending the preferential loans program and the rebuilding of supply in the primary market
- Predicted price growth in 2024 ca. 5-8%

Current situation

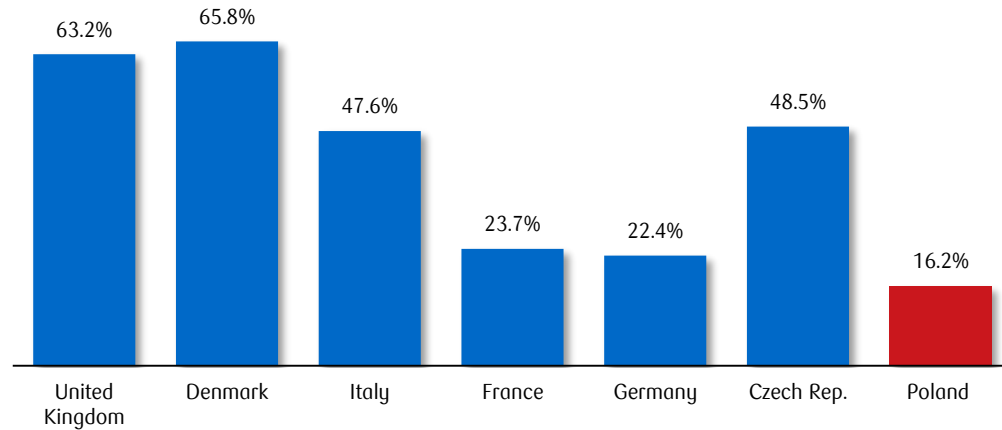
- Sales on the primary and secondary markets:
 - ✓ reaching a minimum in Q3 2022
 - ✓ began to grow gradually in the following quarters
 - ✓ increased rapidly in H2 2023 due to the program of preferential loans
 - ✓ is expected to remain in a slight upward trend in 2024
- Housing loan market has bounced back slightly in 1H 2023 and increased rapidly in H2 2023
- Sales of housing loans will return to the levels observed before the start of the preferential loan program and will probably continue slight upward trend
- The rate of growth in mortgage sales in H2 2024 will depend on the rate of decline in inflation and the further interest rate cuts and possible implementation of the new program of preferential loans since Jul 2024
- In 1H 2024 the relative supply-demand balance in the housing market is expected



Source: PKO BH calculated on BIK data

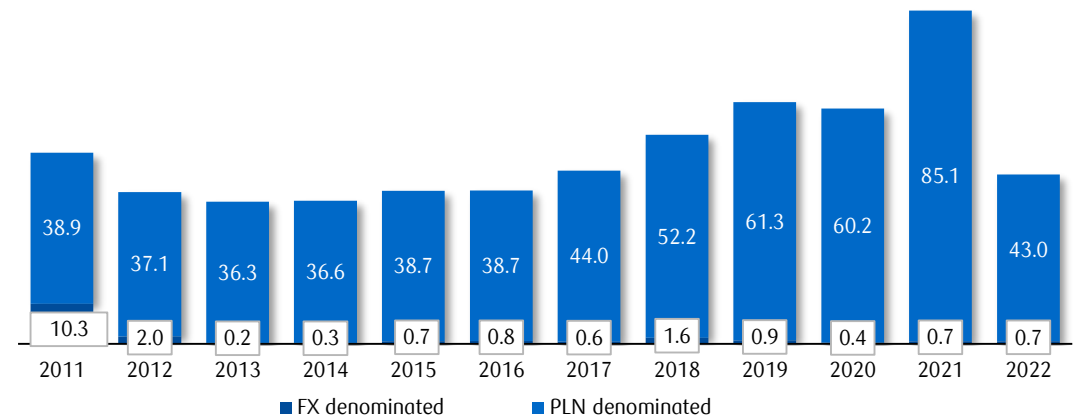
Situation on the domestic mortgage market

Ratio of total outstanding residential mortgage loans to GDP ratio for 2022 (%)



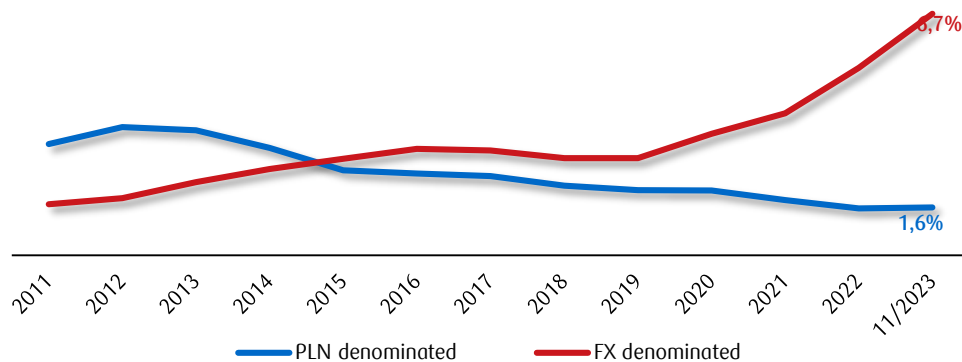
Source: EMF Quarterly review Q4 2022, <https://www.statista.com/>

Value of newly signed residential mortgage loans in Poland (PLN bn)



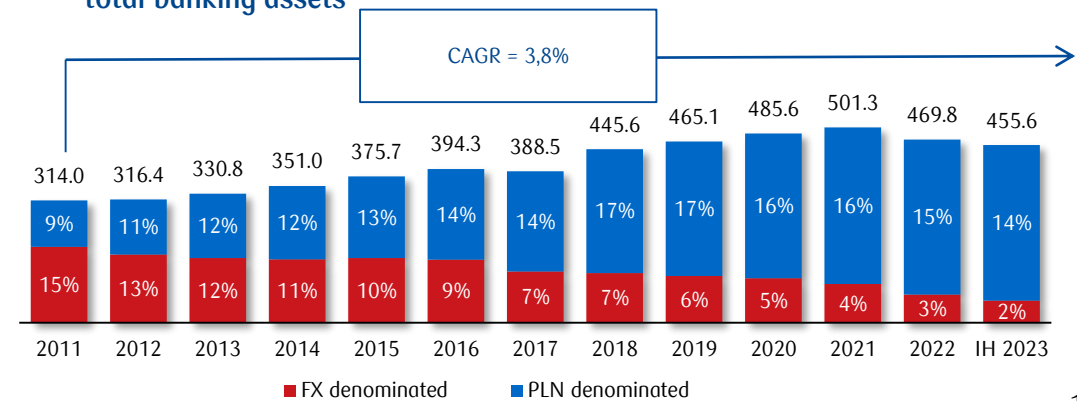
Source: Polish Banking Association

NPLs of mortgage loans in the Polish banking sector (%)



Source: NBP, Polish Financial Supervision Authority

Outstanding value of residential mortgage loans in Poland (PLN bn) as % of total banking assets

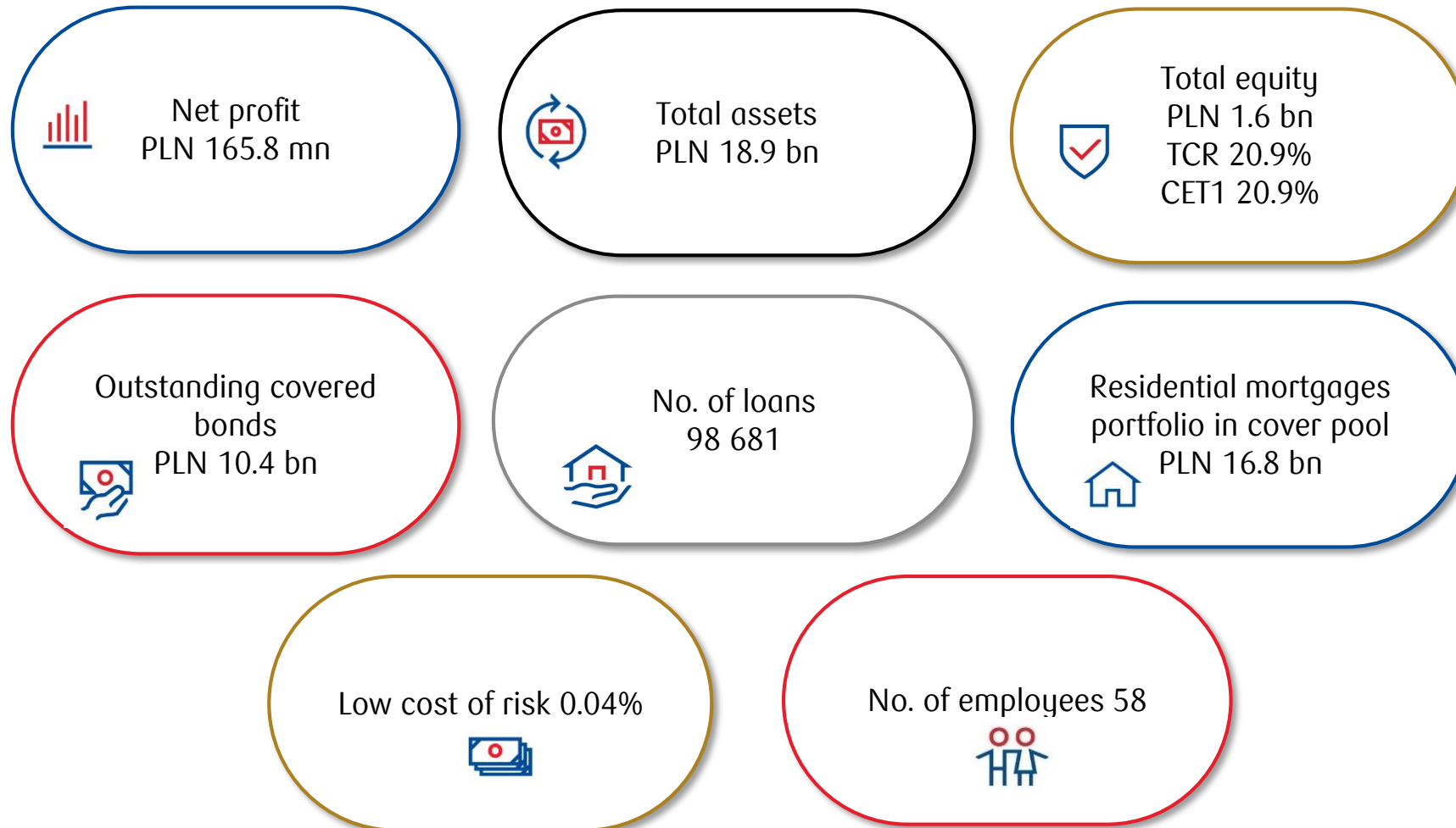


Source: PKO BH calculation based on NBP and KNF data



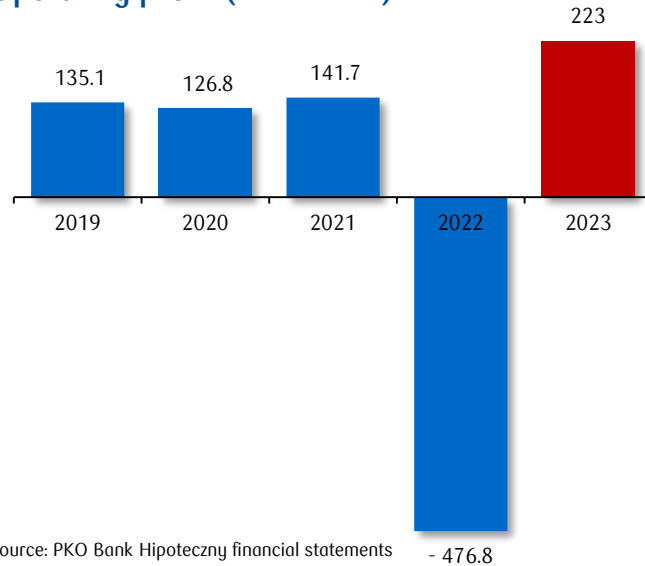
PKO Bank Hipoteczny – covered bonds issuer

Key Achievements – financial highlights as at 31.12.2023

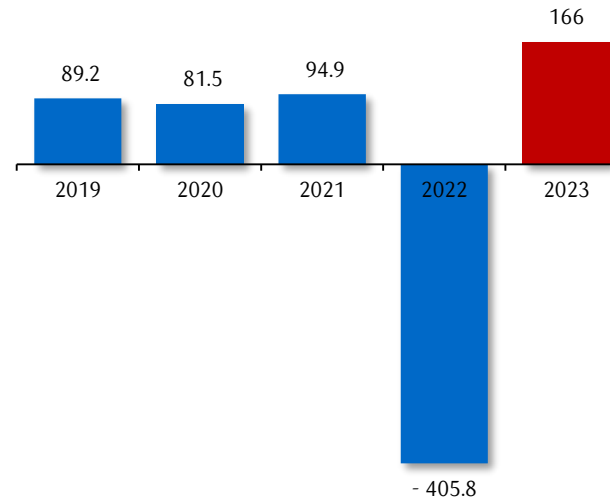


The best net profit in the Bank's history

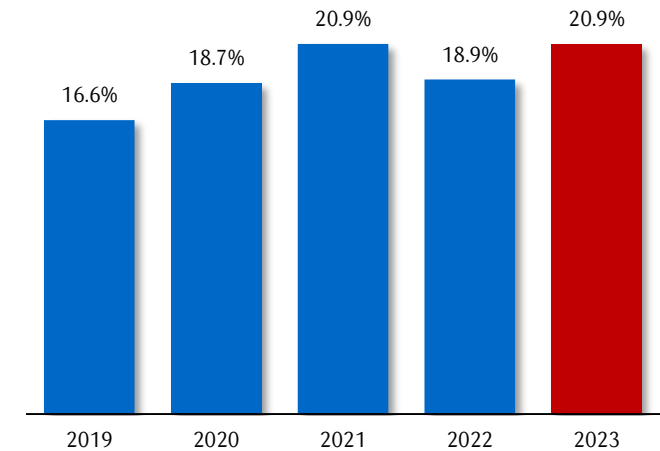
Operating profit (in PLN mn)



Net profit (in PLN mn)



Total capital ratio (in %)

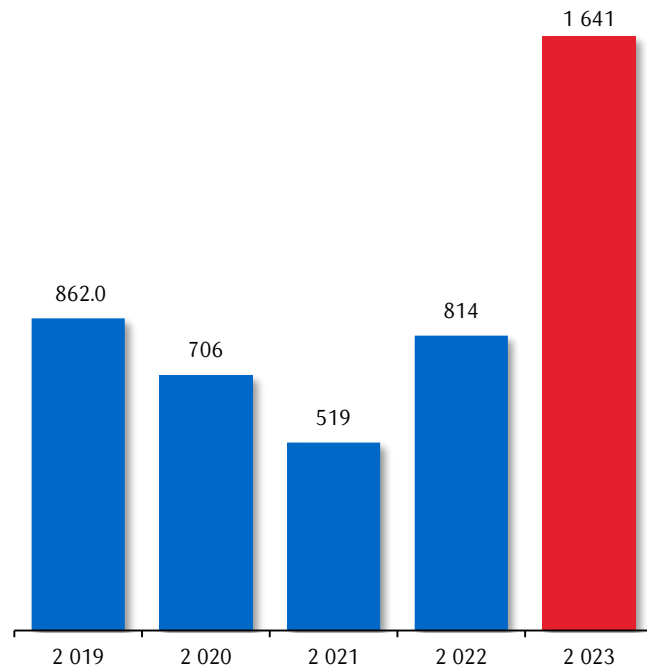


Source: PKO Bank Hipoteczny financial statements

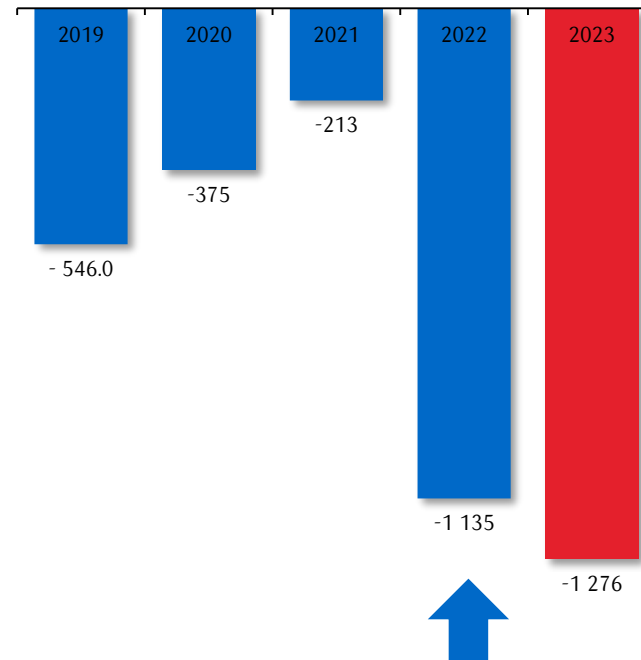
- In 2023, PKO Bank Hipoteczny SA generated a net profit of PLN 165.8 mn (PLN (405.8 mn) in 2022 due to credit moratoria). This was, i.a., mainly caused by high interest income of PLN 1.641 bn, which comprised mainly interest income on residential mortgage loans of PLN 1.575 bn and income on debt securities.
- Loan repayment holidays were implemented in 2022 to all borrowers who finance their own housing needs. Four installments in 2H2022 were subject to moratoria and one loan installment per quarter in 2023. Moratoria were voluntary for the borrowers. This affected profitability of the Bank in 2022 as well as its capital ratios.
- There is a new project of loan repayment moratoria in the Polish Parliament. It will be most likely implemented in 2024 and dedicated to borrowers who finance their own housing needs and in case when the monthly loan installment is at least 30% of the family income. One loan installment per quarter in 3Q-4Q and two in 2Q in 2024 will be probably subject to moratoria. Moratoria will be voluntary for the borrowers.
- Solid capital position attest to the safety and stability of the Bank's operations.

The highest interest income in the Bank's history

Interest income (in PLN mn)

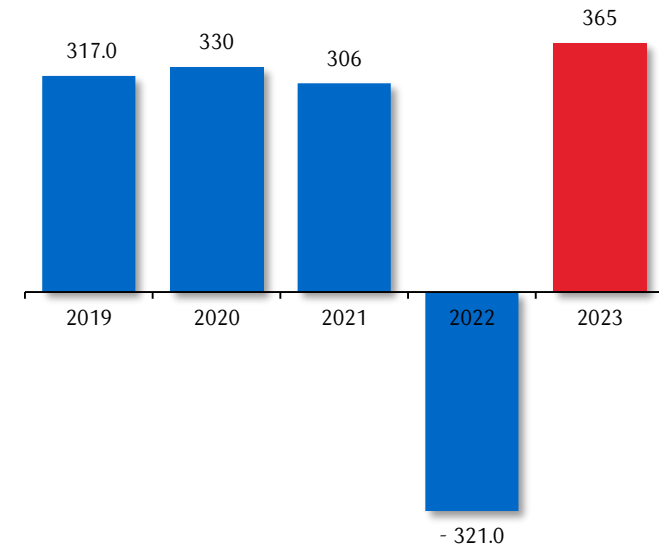


Interest expenses (in PLN mn)



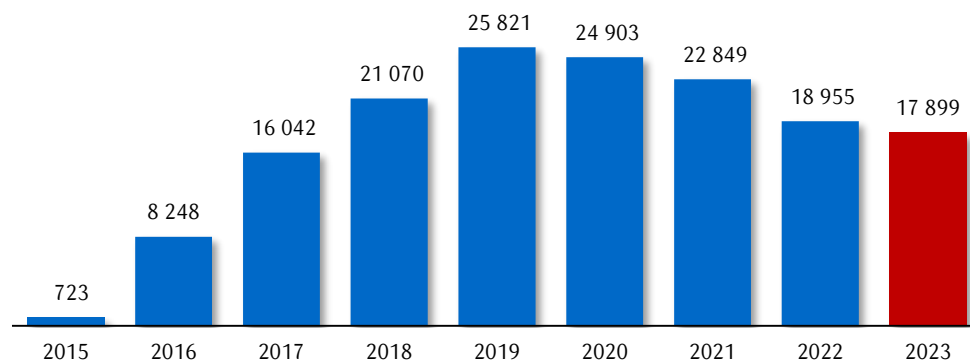
Impact of loan repayment holidays

Net interest income (in PLN mn)



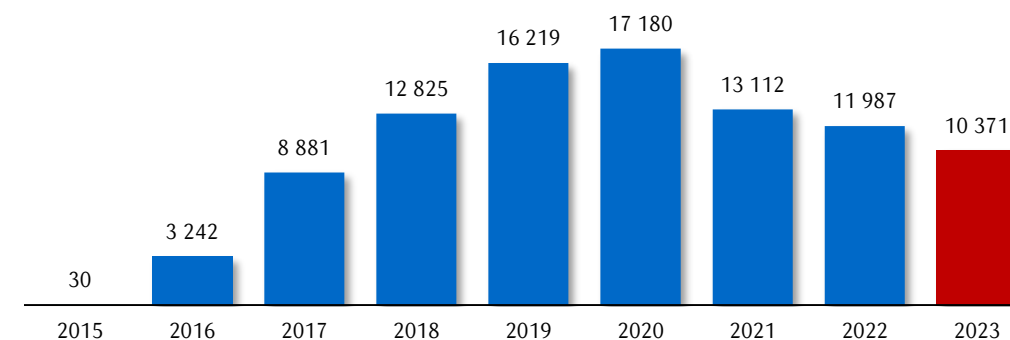
Volumes of covered bonds and PLN-denominated residential mortgage loan portfolio

Residential mortgage loan portfolio – outstanding (PLN mn)



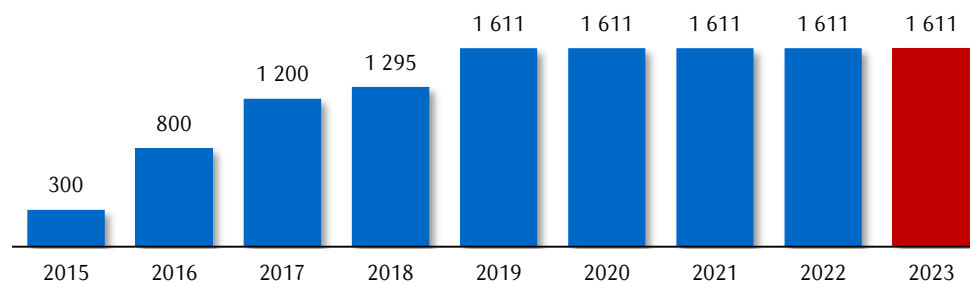
Source: PKO Bank Hipoteczny financial statements

Covered bonds outstanding* (PLN mn)



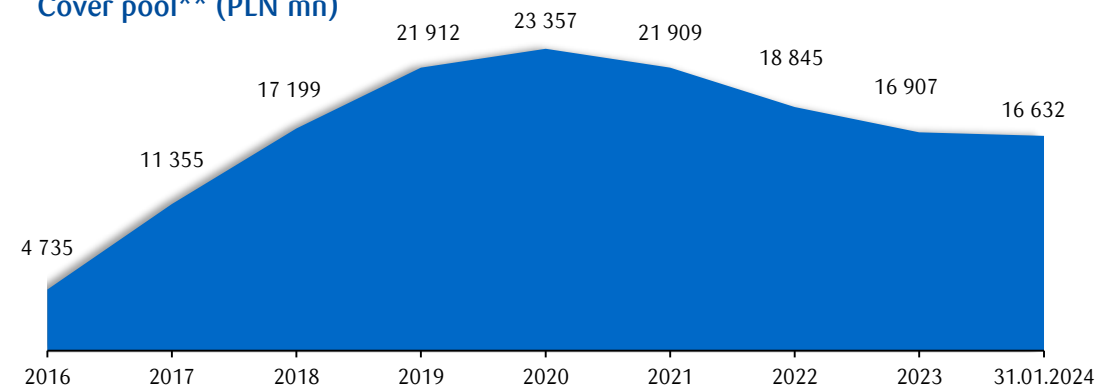
Source: PKO Bank Hipoteczny cover pool reports

Share capital (PLN mn)



Source: PKO Bank Hipoteczny financial statements

Cover pool** (PLN mn)



Source: PKO Bank Hipoteczny cover pool reports

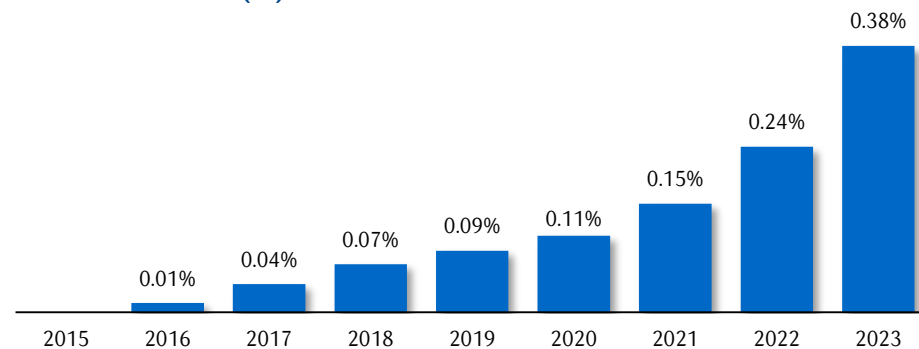
*EUR denominated issues converted by EUR/PLN NBP fixing rate as of the end of particular periods
 **Without hedging instruments included into the cover pool; liquidity buffer included but not counting towards coverage and OC

Excellent quality of the housing loan portfolio at PKO BH



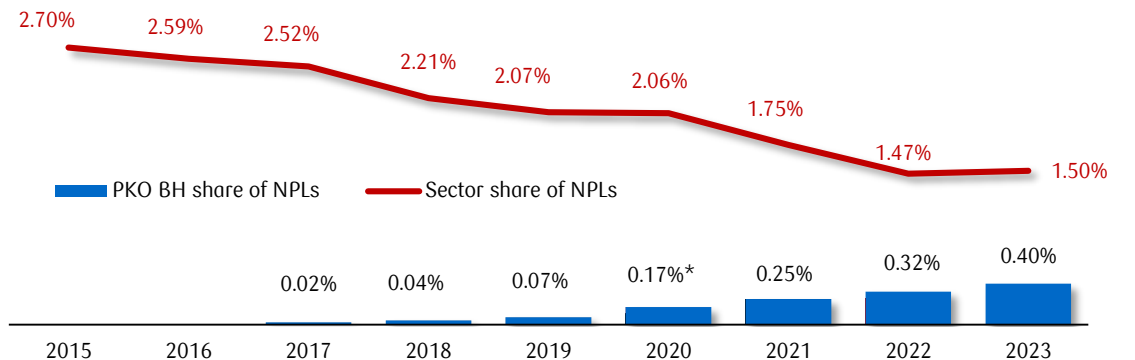
- Reminder actions taken by the Bank at an early stage of the arrears of the loans as well as active management of the impaired loan portfolio (NPL) aimed at returning to timely service => **NPL ratio significantly below the sector level.**
- Slightly growing DPD30+ and NPL portfolio, as a consequence of high interest rates.
- Cost of risk is still very low, which is a consequence of prudent lending policy and very good quality of the loan portfolio

Share of DPD30 (%)



Source: PKO Bank Hipoteczny data

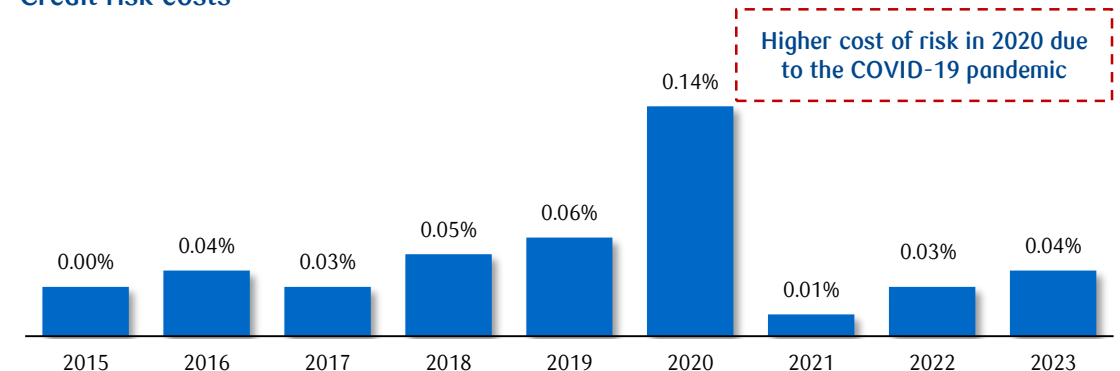
Share of NPLs (%) vs. sector



Source: PKO Bank Hipoteczny data / NBP Banking sector financial data

*Increase of NPLs due to implementation of EBA Guidelines on the application of the definition of default under Article 178 of Regulation (EU) No 575/2013. This is a change in the definition, which does not affect the quality of the portfolio and the cost of risk.

Credit risk costs



Source: PKO Bank Hipoteczny data

Safe lending criteria

Polish banking regulations

- LTV (market value) \leq 80%*

Polish regulations on mortgage banks

- LTMLV (mortgage lending value) \leq 100%
- First-ranking lien in mortgage register
- Legal title: ownership or perpetuity

PKO BH criteria (current offer)

- PLN loans only
- Residential mortgages (principal dwelling only)
- Contractual maturity: up to 35 years
- Interest rate: floating and fixed for 5 years (11.6% of the credit portfolio as of 30 December 2023)

PKO BH criteria

- New construction (selectively) and secondary market
- Collateral: flats or houses
- Not in arrears (in case of pooling)

Subject to approval by the Cover Pool Monitor, the receivables are registered in the cover pool

* In the case of using credit insurance of the required financial contribution LTV \leq 90% is allowed.

High-quality cover pool of purely residential mortgages in PLN



Data as of 31.01.2024

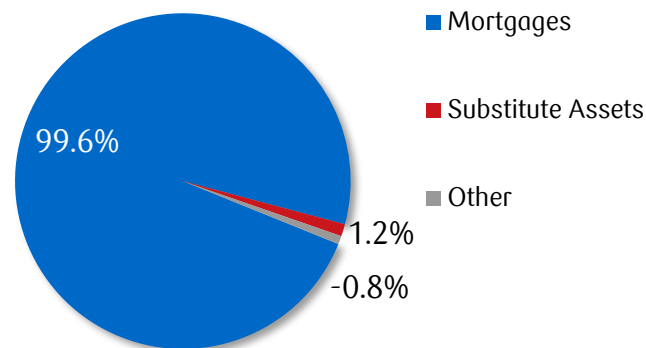
Residential mortgages loan portfolio in cover pool



Mortgage characteristics (in the cover pool):

- **Mortgages: PLN and residential only**
- **Overcollateralisation above regulatory limits: 96.8%** (vs. 5% required)
- Number of loans: 98 051
- Average loan value: PLN 169.6k / EUR 39.0k
- Average indexed LtV 34%
- 10 Largest Exposures: 0.1% of total exposures

Cover pool structure (%)



Features of standard residential mortgage loans in the Cover Pool:

- **Variable** interest rate based on WIBOR rate or **fixed** interest rate for 5 years
- Amortizing **monthly (no interest-only)**
- For **own housing** purposes (no buy-to-let)

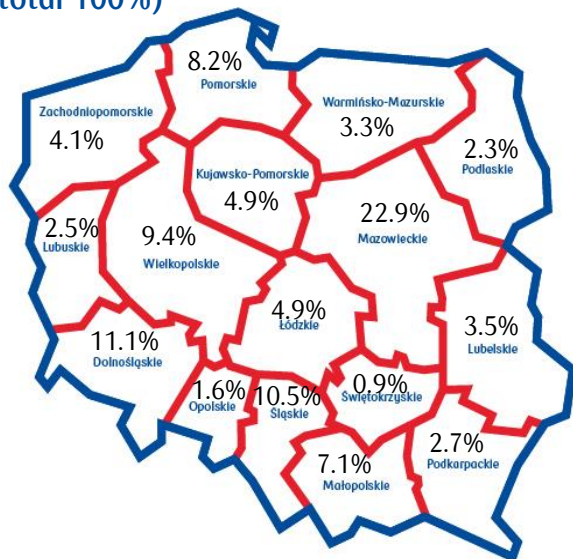
Source: PKO Bank Hipoteczny data including: <https://www.pkobh.pl/en/reports/cover-pool-reports/>

EUR/PLN NBP fixing exchange rate as at 31.01.2024, 1 EUR= 4.34834

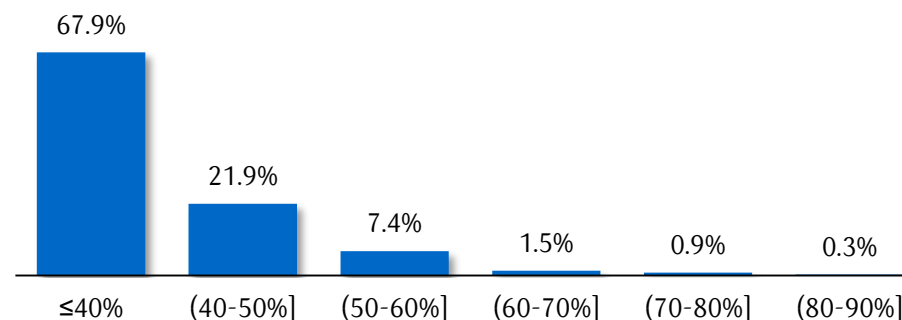
...with good diversification and low LTV ratio

Data as of 31.01.2024

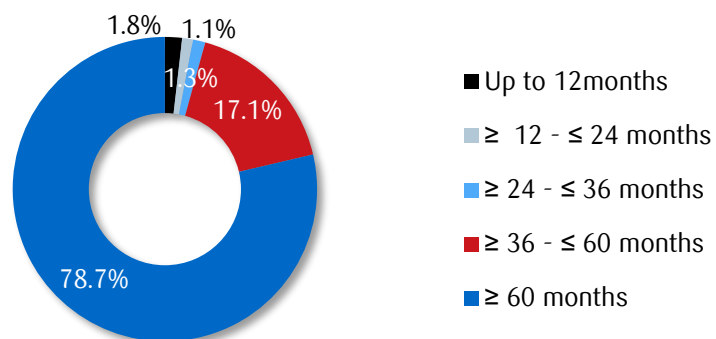
Cover pool composition by geographical location in Poland (total 100%)



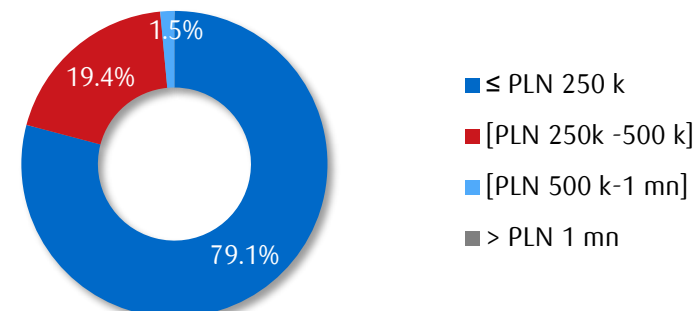
Cover pool composition by LTV (% residential loans)



Cover pool composition by loan seasoning (%)

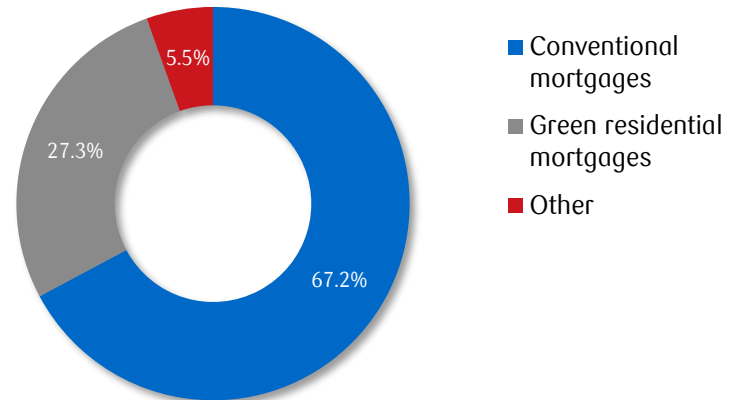


Cover pool composition by loan value (% number of loans)



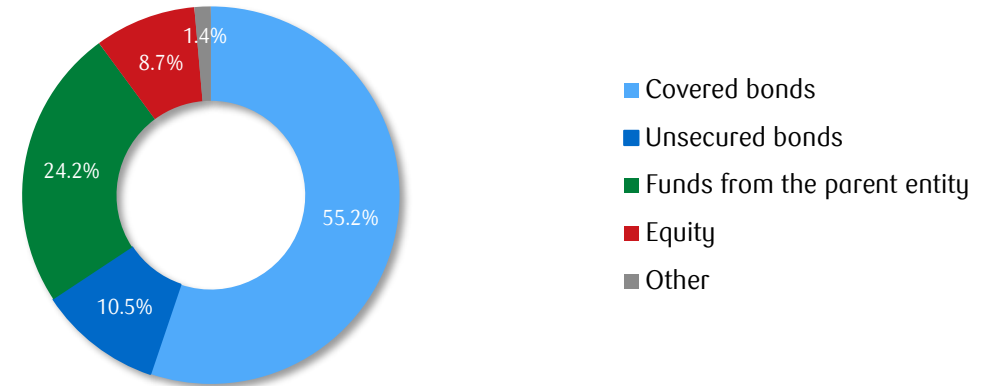
Asset and liability structure

PKO Bank Hipoteczny assets' structure in % as of 31.12.2023



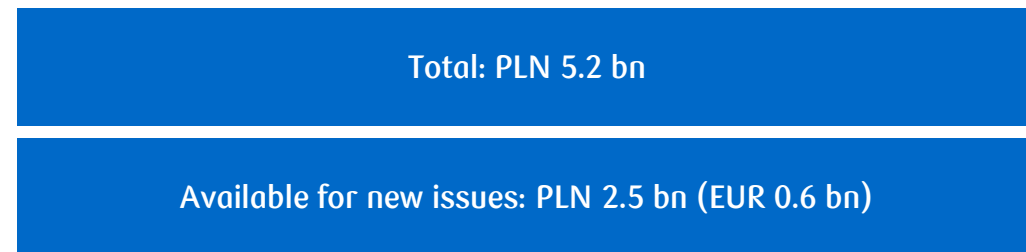
Source: PKO Bank Hipoteczny financial statement, Source: PKO Bank Hipoteczny Cover pool report

PKO Bank Hipoteczny funding structure in % as of 31.12.2023



Source: PKO Bank Hipoteczny financial statement

Green assets in cover pool (data as of 31.01.2024)



Source: PKO Bank Hipoteczny Cover pool report




Total assets in cover pool (data as of 31.01.2024)



Source: PKO Bank Hipoteczny Cover pool report

*EUR/PLN NBP fixing exchange rate as at 31.01.2024, 1 EUR = 4.3434

PKO BH the biggest issuer of covered bonds in Poland

Issue Date	Maturity	Series	Amount Issued in MLN	Currency
2015-12-11	2020-12-11	1	30	PLN
2016-04-27	2021-04-28	2	500	PLN
2016-06-17	2021-06-18	3	500	PLN
2017-04-28	2022-05-18	4	500	PLN
2017-06-22	2021-09-10	5	265	PLN
2017-10-27	2023-06-27	6	500	PLN
2018-04-27	2024-04-25	7	700	PLN
2018-05-18	2022-04-29	8	100	PLN
2018-07-27	2025-07-25	9	500	PLN
2018-08-24	2028-08-24	10	60	PLN
2018-10-26	2025-04-28	11	230	PLN
2019-06-10	2024-09-30	12 	250	PLN
2019-12-02	2024-12-02	13 	250	PLN
2016-10-24	2022-06-24	1	600	EUR
2017-02-02	2024-02-02	2	25	EUR
2017-03-30	2023-01-24	3	500	EUR
2017-09-27	2024-08-27	4	500	EUR
2017-11-02	2022-11-03	5	54	EUR
2018-03-22	2024-01-24	6	500	EUR
2019-01-28	2021-11-23	7	600	EUR
2022-07-04	2025-06-25	8 	500	EUR
2023-02-09	2026-02-09	9	500	PLN
2023-06-28	2026-06-29	10	500	PLN
2023-11-02	2026-11-02	11	750	PLN

Domestic Programme
of Covered Bond Issuance
PLN 4.385 BN issued
as at 31.12.2023

International Programme
of Covered Bond Issuance
EUR 3.279 BN and
PLN 1.750 BN issued
as at 31.12.2023

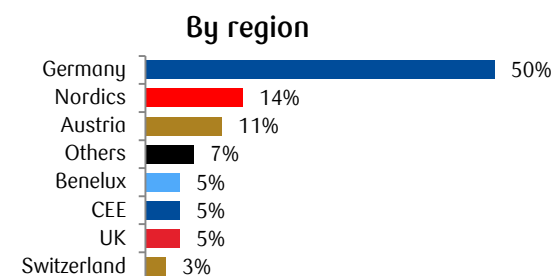
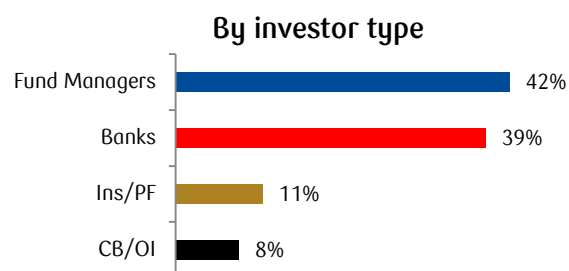


No. 1 Polish EUR bond issuer in the international markets



	#3 Benchmark issue	#4 Benchmark issue	#1 Private issue	#6 Benchmark issue
Issue size	500 000 000 EUR	500 000 000 EUR	25 000 000 EUR	500 000 000 EUR
Moody's rating	Aa1	Aa1	Aa1	Aa1
Re-offer spread	MS + 28 bp	MS + 23 bp	MS + 20 bp	MS + 36 bp
Annual coupon	0.750%	0.750%	0.820%	2.125%
Price/Yield as of issue date as of issue date	99.906/0.764%	99.892/0.769%	100/0.820%	99.98/2.132%
Issue date	27.09.2017	22.03.2018	02.02.2017	04.07.2022
Maturity date	27.08.2024	24.01.2024	02.02.2024	25.06.2025
Stock Exchange listing venue	Luxembourg and Warsaw	Luxembourg and Warsaw	Luxembourg	Luxembourg and Warsaw
ISIN	XS1690669574	XS1795407979	XS1559882821	XS2495085784

Distribution of all outstanding EURO-denominated benchmark covered bond issues of PKO BH



Covered bond rating at country ceiling level

MOODY'S

Government of Poland rating

A2/P-1

stable outlook

PKO Bank Polski rating

A3/(P)P-2

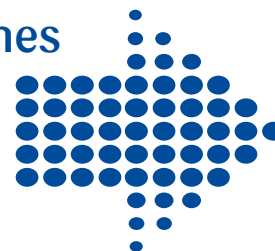
stable outlook

PKO Bank Hipoteczny rating

A3/P-2

stable outlook

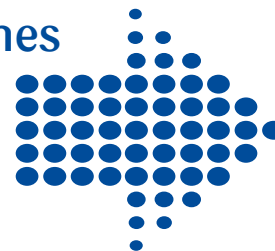
+4 notches



+5 notches



+5 notches



PKO Bank Hipoteczny
Covered Bond Rating
(PLN & EUR)

Aa1

Poland country ceiling = Aa1

PKO Bank Hipoteczny covered bond rating is based on:

- High cover pool quality
- OC at the minimum level of 5% (Moody's OC consistent with Aa1 rating is 0.5%)
- Legally defined and predictable bankruptcy procedure



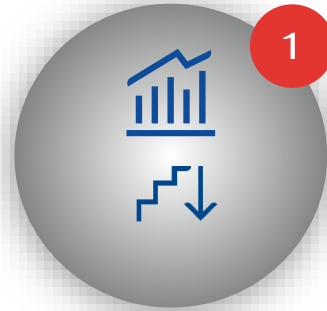
Appendices

Strategy for 2023-2025

„Efficient in action, committed to development”

Our advantages enable us to pursue an ambitious strategic mission caring for sustainable development. We provide:

Our clients with tailor-made credit products for real estate financing



Our investors with high-security covered bonds

Our strategic mission

Our employees with diverse and friendly working environment



Our shareholder with sources of stable funding

Our advantages:



Scale of business



Security



High quality of loan portfolio



Cost effectiveness

Strategic goals 2023-2025

We want to achieve ambitious strategic goals having in mind not only current profitability, but also investing in development that goes beyond the horizon of the strategy. Strategic goals of PKO Bank Hipoteczny:



Green Covered Bonds as an important addendum to the funding mix

Green covered bonds as a financing tool for PKO Bank Hipoteczny mortgages

PKO Bank Hipoteczny as a first bank in Poland has identified a significant influence of buildings on climate and decided to establish a strategic project to acquire green assets and issue green covered bonds.

Documentation/ Framework

- PKO Bank Hipoteczny green covered bonds are in line with **ICMA Green Bond Principles (GBP)**.
- Second Party Opinion of PKO Bank Hipoteczny **Green Covered Bond Framework** has been issued by Sustainalytics.
- PKO Bank Hipoteczny green covered bonds are certified by **Climate Bonds Initiative**.



Methodology

- In 2022 PKO Bank Hipoteczny updated its Framework, which includes criteria and methodology to identify energy efficient residential buildings in the Bank's loan portfolio. It was developed by green buildings consultant Drees & Sommer.
- PKO Bank Hipoteczny methodology is approved by Climate Bonds Initiative under their Low Carbon Criteria as proxy for energy-efficient residential properties in Poland.



Special offer for green mortgages

- Dedicated offer for financing of energy efficient mortgages with valid EPCs in PKO BP.



Energy Efficient Mortgage Label

- PKO Bank Hipoteczny joined the **Energy Efficient Mortgage Label** in February 2021.
- **We report in HDT format since 1Q'22.**



PKO Bank Hipoteczny Green Covered Bonds are in line with ICMA GBP



Use of Proceeds

- Financing and refinancing of eligible assets on PKO Bank Hipoteczny's balance sheet.
- Eligible assets include loans for residential buildings as defined in the eligibility criteria:
 - new or existing residential buildings representing top 15% low carbon buildings in Poland;
 - existing residential buildings in Poland, which have undergone a property upgrade (major renovations, refurbishment, thermo-modernization or efficiency upgrade) achieving a 30% Energy efficiency improvement.

Project Evaluation and Selection

- PKO Bank Hipoteczny has established a **Green Covered Bond Committee (GCBC)** which is comprised of one representative from each of the following areas of the bank: **Treasury, Residential Mortgage Loans, Risk, Compliance, Controlling and The Cover Pool Register**.
- GCBC reports directly to the Management Board of the Bank.
- GCBC's role is to oversee the process for evaluation and selection of eligible loans according to the adopted methodology.

Management of Proceeds

- The proceeds from green covered bonds can be allocated either to refinance existing portfolio or to finance new loans which fulfill eligibility criteria.

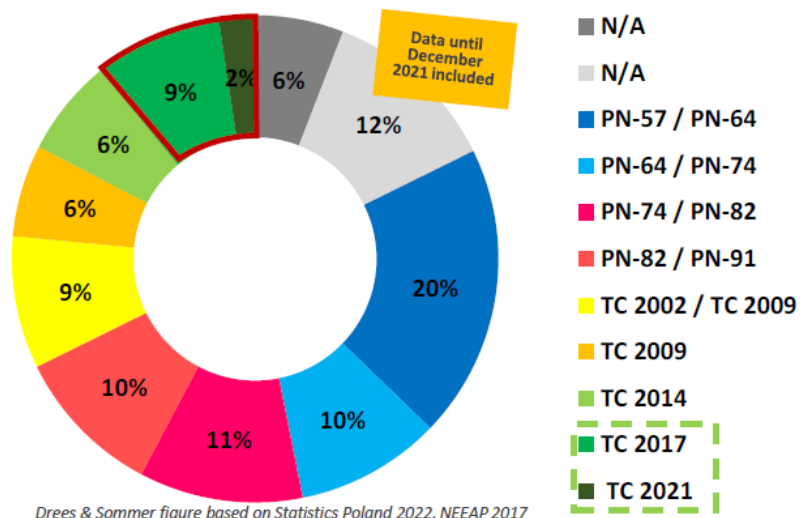
Reporting

- **Allocation reporting** is available to investors after every green covered bond issuance and annually thereafter, until the bonds have been fully repaid.
- **Impact reporting** is done on an annual basis on climate benefits associated with the green eligible loans on:
 - estimated annual primary energy savings in MWh;
 - estimated annual GHG emissions avoided in tons of CO2 equivalent.

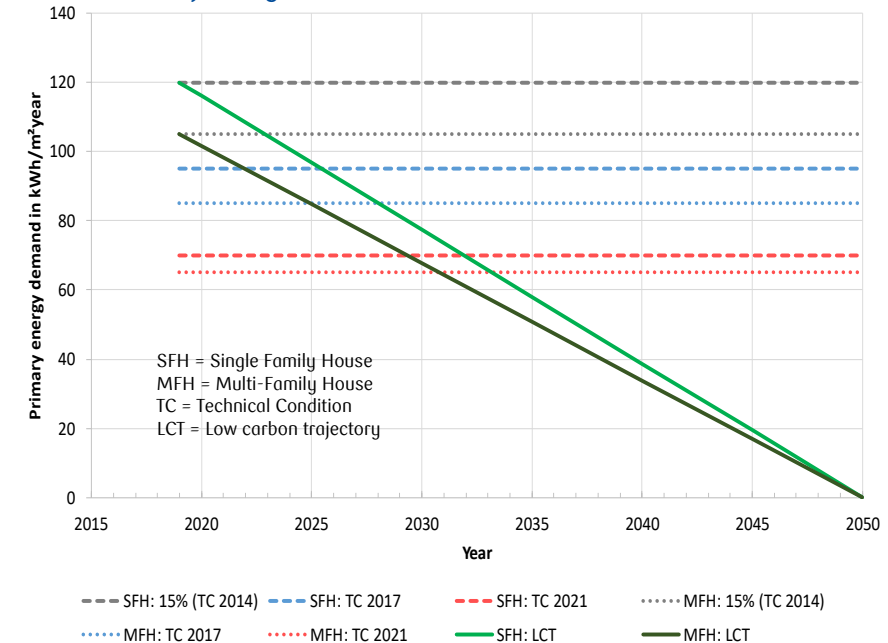
PKO Bank Hipoteczny Green Covered Bonds Methodology



- Based on the statistical analysis of buildings and mandatory building energy performance codes minimum criteria for a green bond were determined
- Buildings are deemed to be within the Top 15% of its local market if: Technical Condition is TC 2017 or newer
- Our eligibility criteria are not static and are in line with the trajectory provided by CBI (aimed at climate neutrality by 2050).
- New buildings complying with Technical Note 2017 or later by year of construction are automatically eligible for qualification for bonds where the mid-point of the bond term is no later than 2025.



A Low Carbon Trajectory



Source: <https://www.climatebonds.net/files/files/Residential%20Proxy%20Poland%281%29.pdf>

- A low carbon trajectory (LCT) connects the basis requirements of TC 2014 (SFH: PED ≤ 120 kWh/m²year | MFH: PED ≤ 105 kWh/m²year) as the start of the year 2019 towards the Zero-Emission-Goal in 2050 with zero non-renewable primary energy.
- The low carbon trajectories for single- and multifamily houses serve as the 15th percentile baseline for the local Polish residential market.



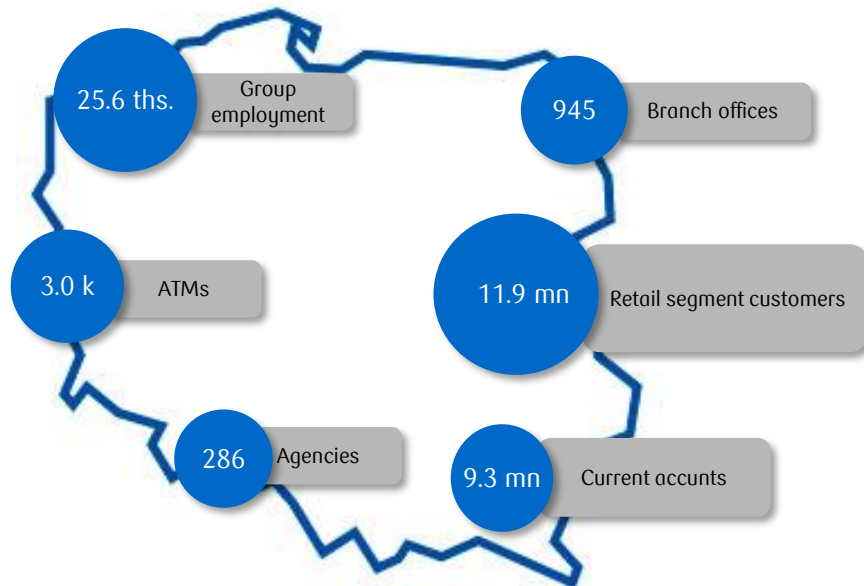
PKO BP Group overview

PKO BP – a leader in the Polish banking sector



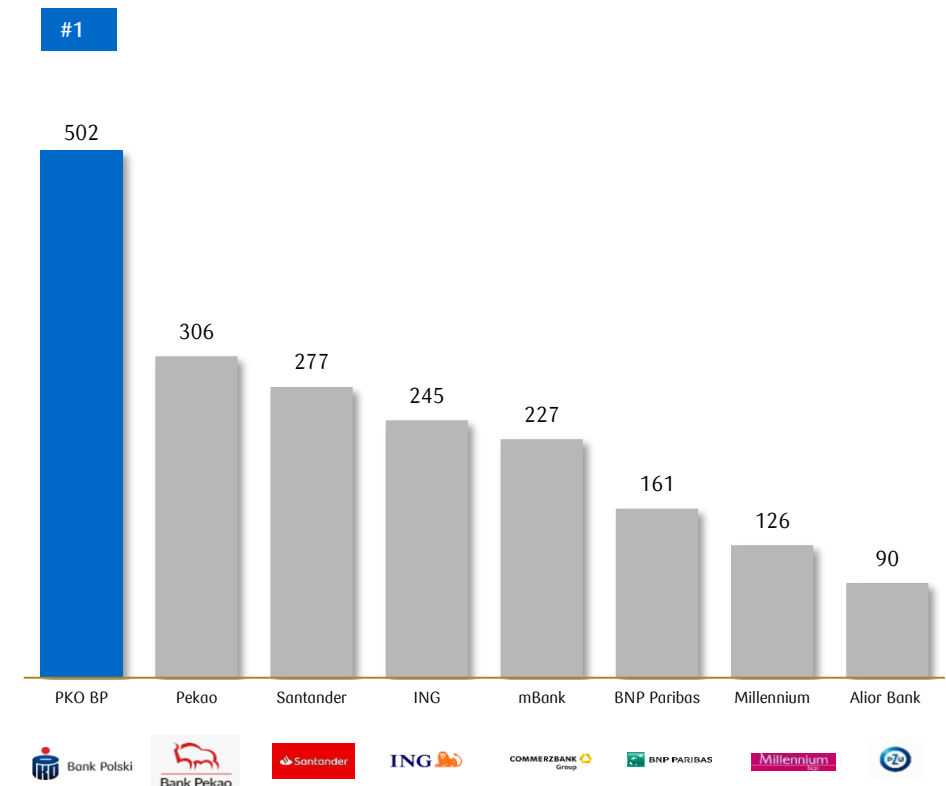
Bank Polski

- Net profit PLN 5.5 billion, +66% y/y thanks to core income increase by 18.6% y/y while credit risk costs remain stable
- Growth of both loans by 8.5% y/y and savings by 19.6%, significantly above market dynamics
- Significant strengthening of legal risk provisions by PLN 5.4 billion and a further increase in the credit provisions coverage ratio to 113%
- Strong capital base with CET1 at 17.8%, recommendation of the Polish Financial Supervision Authority allowing to distribute part of 2023 net profit (<75%, no more than net profit decreased by PLN 1.6 billion which are already included to bank's own funds)



Source: PKO BP 1H 2023 financial statement

Market position by total assets as of 31.12.2023 (PLN bn)



Source: Financial statements of the banks

*PKO BP Group includes among others PKO Bank Polski S.A., PKO Leasing S.A. Group, PKO Towarzystwo Funduszy Inwestycyjnych S.A., PKO Finance AB and PKO Bank Hipoteczny S.A.

CHF mortgage settlement program

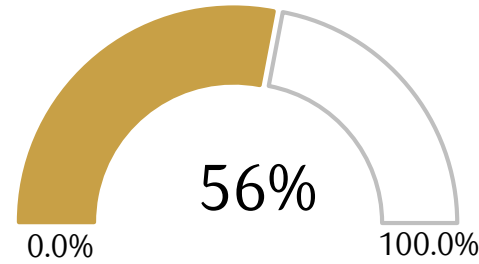


Bank Polski

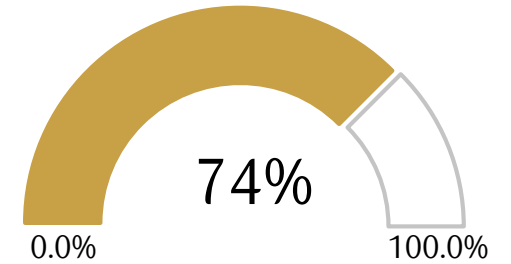
57 ths motions submitted for mediation
 37 ths mediations concluded successfully
 37 ths settlements concluded

31st of December, 2023

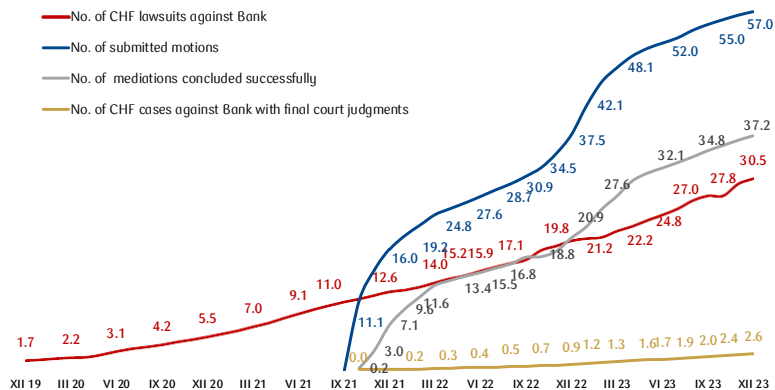
Share of motions submitted to the total no. of entitled CHF customers



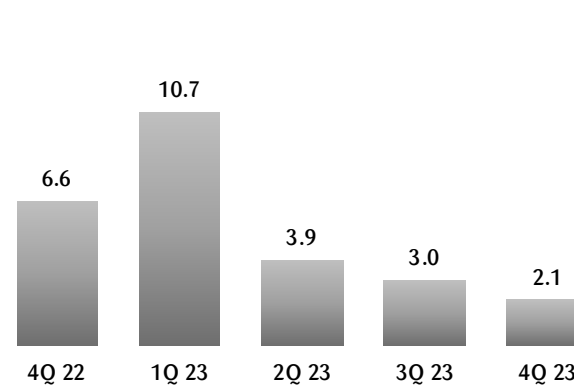
Share of successfully completed cases in total completed cases



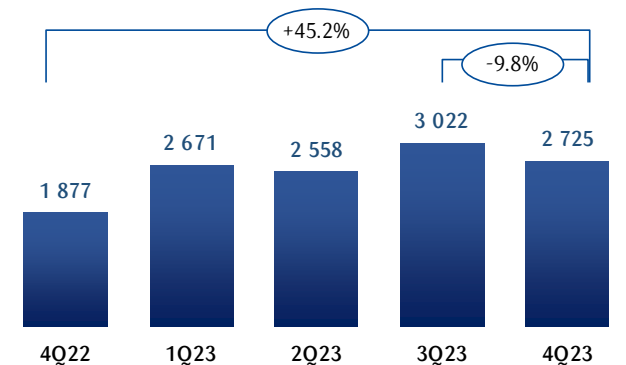
Number of cases regarding settlements of CHF borrowers



New mediation motions submitted [ths Items]



Change in the number of court proceedings during the quarter [Items]



Data starting from the moment when program of settlements for Swiss franc borrowers was launched

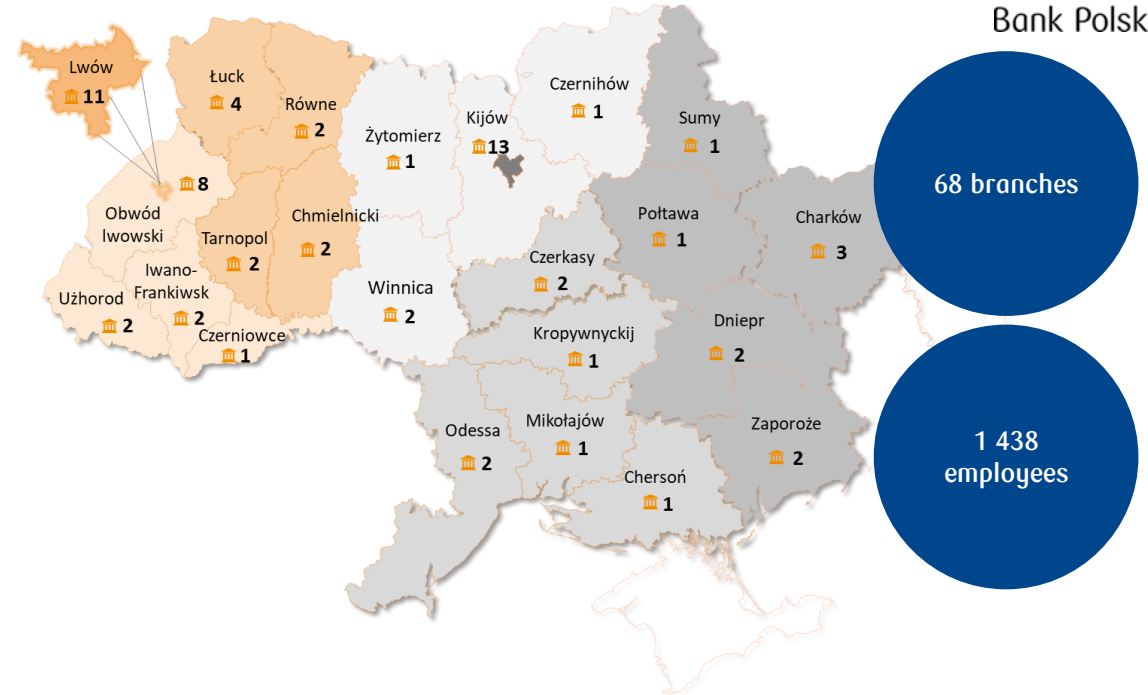
KREDOBANK S.A.



Bank Polski

KREDOBANK S.A. is an universal bank servicing both retail and SME clients, operating mainly in western part of Ukraine and Kiev region

- Continuation of activities in regions not affected by active hostilities. 13 branches were located in the regions most affected by the war
- KREDOBANK S.A. is included in the list of banks of systemic importance, which includes the top 15 Ukrainian banks
- KREDOBANK S.A. grants loans to corporate and SME customers under government programmes and in cooperation with foreign banks



KREDOBANK'S SHARE OF THE GROUP'S RESULTS
December 31, 2023:



KREDOBANK S.A. GROUP (mIn PLN)	Dec 31, 2023	Dec 31, 2022	Δ
Gross loans	1 465	1 836	-20%
Gross deposits	4 806	4 130	16%
Total assets	5 788	4 862	19%
Equity	602	496	21%
	2023	2022	Δ
Net income	143	18	>100%

Consolidated data according to IFRS

Credit / ESG ratings and ownership

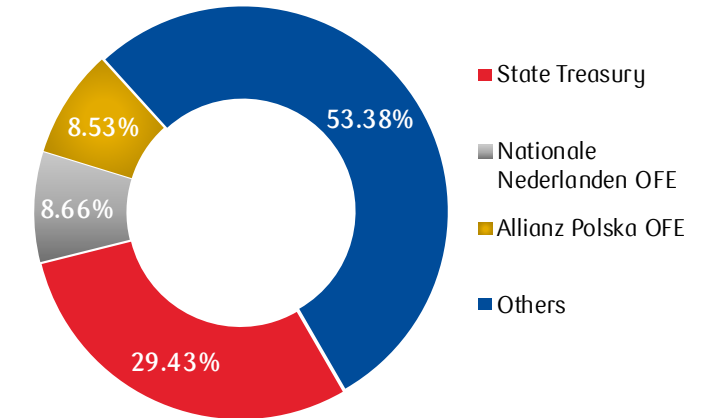


Bank Polski

Credit Ratings

Moody's Investors Service	Long-term rating	
	Deposits	A2
	Liabilities	A3
	Counterparty risk	A2
	Outlook	Stable
	Short-term rating	
	Deposits	P-1
	Liabilities	(P)P-2
	Counterparty risk	P-1
	Baseline Credit Assessment	baa2

Shareholder structure (number of shares: 1 250 mln)



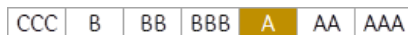
- The Bank's shares have been listed on the Warsaw Stock Exchange since November 10, 2004.
- Largest domestic bank on the WSE in terms of capitalization PLN 63 billion (as at 31/12/2023)
- Bank PKO BP is included in the following indices: WIG, WIG20, WIG30, WIG Banki, WIG-ESG, FTSE Russell, Stoxx 600
- ISIN: PLPKO0000016; Bloomberg: PKO PW; Reuters: PKOB WA

ESG Ratings



A ↔

(A in 2022)



24 Medium Risk ↓

(23,5 in 2023)



3.3 ↔

(3.3 in 2022)



46 ↔

(46 in 2022)

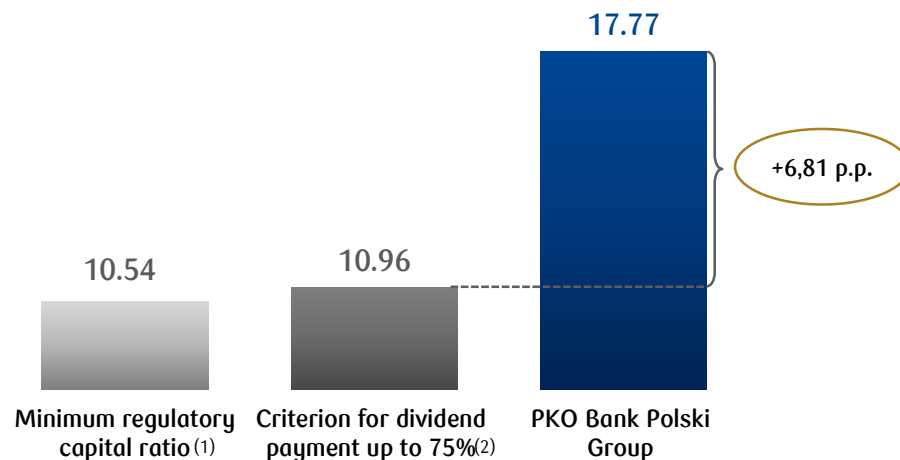


Solid capital position

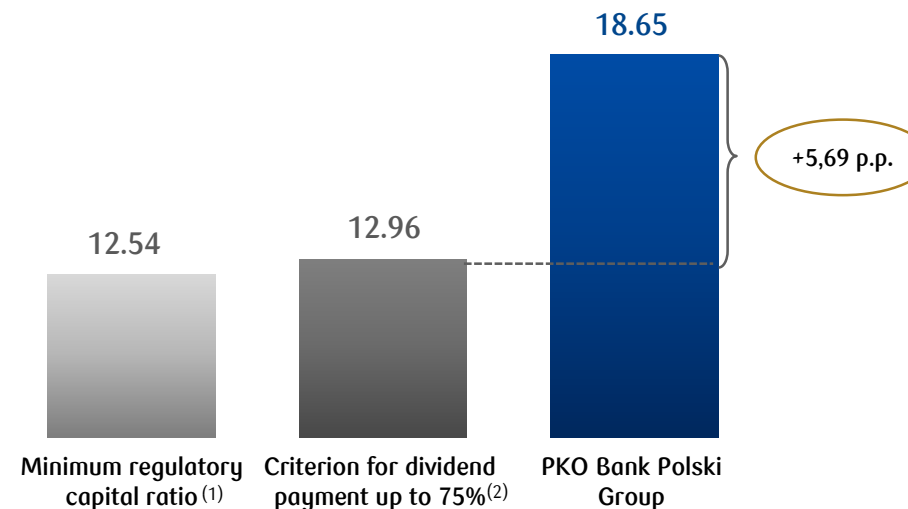


Bank Polski

CET1 = Tier 1 capital ratio [%]



Total capital ratio (TCR) [%]



Recommendation of the PFSA allowing to distribute part of 2023 net profit (<75%, no more than net profit decreased by PLN 1.6 bn which are already included to bank's own funds)

(1) - Tier 1: CRR 6% + conservation buffer 2.5% + OSII buffer 2% + countercyclical buffer 0.04%

TCR: CRR 8% + conservation buffer 2.5% + OSII buffer 2% + countercyclical buffer 0.04%

2) - Minimum regulatory capital ratio + PFSA's buffer for Group's sensitivity to an adverse macroeconomic scenario recommended in Pillar II is 0.42% (Bank: 0.48%)
+additional requirement: good credit quality of the portfolio of receivables from the non-financial sector, both in the Group and the Bank level (NPL share <5%)

Promoting ESG throughout the organization by conducting the Bank's operations in a sustainable and impactful manner



Environmental

We take care about our common future by:

- Moving to new headquarters in September 2023 – SkySawa building certified by BREEAM Interim "Outstanding" rating
- Promoting pro-environmental real estate solutions
- Being a PKO Group's competence center for green residential mortgages
- Issuing green covered bonds
- Reducing the carbon footprint of Bank's operations and usage of plastic and printed materials



Social

- Participating in socially responsible initiatives in the field of mortgage products, including sectoral works
- Educating customers on mortgage loans, green solutions and real estate sector via new dedicated online platform
- Putting emphasis on the transparency of communication with customers by promoting an understandable and simple language



Corporate Governance

- Promoting diversity as a value
- Creating a friendly working environment and taking care of employees' development
- Enabling effective communication between employees
- Promoting a healthy lifestyle among employees

PKO BH Green Covered Bonds: EU Taxonomy – eligibility criteria for climate change mitigation



Economic activity	Screening Criteria	Residential Single-Family ¹	Residential Multi-Family ²
7.1 Construction of new buildings Built after 31/12/2020	Nearly Zero-Energy Building Primary energy demand minus 10%	At least 10% lower than the requirements for the primary energy demand of the "Nearly Zero-Energy Building" standard (NZEB). Based on the "Energy Performance of Buildings Directive (EPBD)", the NZEB-standard is implemented in the implemented in Technical Condition 2021 (TC 2021) requirements.	
	Indicative reference values:	PED ≤ 63 kWh/(m ² year)	PED ≤ 58.8 kWh/(m ² year)
7.2 Renovation of existing buildings Built before 31/12/2020	Major Renovation Cost optimal level	The building renovation complies with the applicable requirements for major renovations as defined in the Energy Performance of Buildings Directive (EPBD), based on the cost optimal level as defined in Technical Condition 2014 (TC 2014).	
	Property Upgrade Relative improvement ≥ 30% in primary energy demand	Relative improvement in primary energy demand ≥ 30% in comparison to the performance of the building before the renovation. Reductions through renewable energy sources are not taken into account.	
7.7 Acquisition and ownership of buildings Built before 31/12/2020 ³	top 15% of the national existing building energy code	Technical condition TC 2017 or newer	
	top 15% of the national existing building stock	PED ≤ 95 kWh/m ² year FED ≤ 67.7 kWh/m ² year	PED ≤ 85 kWh/m ² year FED ≤ 60.6 kWh/m ² year

¹ SFH: Single-Family house with 1-2 units | ² MFH: Multi-Family house with >2 units | PED = primary energy demand | FED = Final energy demand | ³ For buildings built 01/01/2021 or newer, the criteria in 7.1 are required to comply with.

Source: Drees & Sommer low carbon building criteria are based on EU Taxonomy (Delegated Act – July 2021). Criteria are valid for assets located in Poland. Status: May 2022

PKO BH Green Covered Bonds Methodology: Climate Bonds Initiative (CBI) certified eligibility criteria

Green Bond criteria - The object fulfills one of the following criteria:			Residential Single-Family ¹ and Multi-Family ²
Climate Bonds Initiative	New Construction or Existing Buildings	1) Energy standard or year of construction is equal or newer <i>based on CBI's low carbon buildings criteria in compliance with CBI's established residential market proxy for Poland</i>	New buildings complying with Technical Note 2017 or later by year of construction are automatically eligible for qualification for bonds where the mid-point of the bond term is no later than 2025.
	Existing Buildings	2) Property upgrade <i>in compliance with CBI's established residential property upgrade methodology</i>	Major renovation with an improvement in the CO2 emissions figure from EPC from before and after the retrofit, based on tenor of bond, which meet the requirement of Technical Note 2014 (issued after July 2015). Minimum improvement in carbon emissions ≥ 30% Term 1-5 years: 30% improvement Term 5-30 years: 30%-50% linear improvement Term ≥ 30 years: 50% improvement

Robust regulatory regime

- Covered bonds and mortgage banks in Poland are regulated by the Polish Covered Bond Act. Covered Bond Directive was implemented into Polish Law in July 2022
- By law, only **specialized mortgage banks** are entitled to issue covered bonds in Poland
- **Segregation of assets** in the cover pool (only mortgages, cash, sovereign debt or similar*)
- **Constant supervision by the independent Cover Pool Monitor** (appointed by KNF) over mortgage bank activities and its cover pool
- Conservative approach of determining **the mortgage lending value** (through-the-cycle) of real estate with rules approved by KNF
- **Strict regulatory limits on mortgage banks and covered bonds** including:
 - min. 5% overcollateralisation (OC)
 - liquidity buffer to cover the maximum cumulative net liquidity outflow in 180 days
 - coverage and liquidity tests
- **Mandatory FX risk limitation.**
- **Legally defined and predictable bankruptcy procedure** (not at the discretion of the issuer) designed to achieve best-possible outcome for covered bond holders (12 months extension period after issuer's default and switch to pass-through if available liquidity will not be sufficient to repay the bonds within 1 year)
- Covered bonds exempt from bail-in protocol (BRRD)**



*Securities issued or guaranteed by the State Treasury of the Republic of Poland, the National Bank of Poland, the ECB, governments and central banks of the EU and OECD member states (except for states that have restructured their external debt in the past five years).

**In the event of compulsory restructuring of mortgage banks, covered bonds may be subject to compulsory write-down and/or conversion to the extent the value of the covered bonds exceeds the value of the cover pool.

Regulatory safeguards built into bankruptcy procedure

Process	Covered bond repayment	Recourse and priorities	Hedging
<p>P1. Clear process of bankruptcy declaration</p> <p>P2. Clear deadlines for key actions of bankruptcy procedure defined in the legal framework</p>	<p>C1. Avoidance of time subordination</p> <p>C2. Explicit rules for early repayment of covered bonds</p> <p>C3. Explicit procedure for treatment of covered bonds, which became due before declaration of bankruptcy</p>	<p>R1. Dual recourse (separate bankruptcy asset pool and general bankruptcy estate)</p> <p>R2. Clearly defined order of priorities of payments from the separate bankruptcy asset pool</p>	<p>H1. Hedging arrangements will survive declaration of bankruptcy and will be extended by 12 months.</p> <p>H2. Possibility of the bankruptcy receiver to enter into hedging transactions (provided tests are passed)</p>

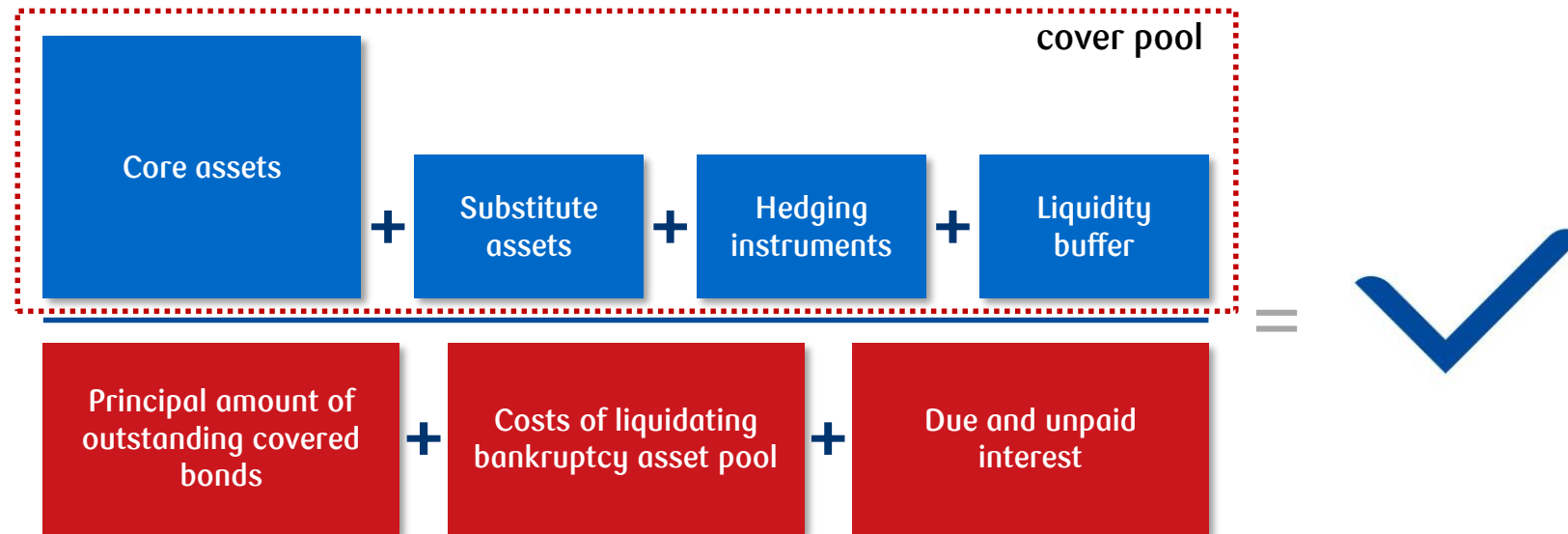
Covered bondholders entitled with option to intervene in bankruptcy procedure

	passed	passed	failed
Coverage test	passed	passed	failed
Liquidity test	passed	failed	n/a
Covered bonds repayment	<ol style="list-style-type: none"> Covered bonds repaid according to terms and conditions of the covered bonds, taking 12 months extension into account Receiver may enter into hedging transactions 	<ol style="list-style-type: none"> Maturity date of all covered bonds extended to the date falling three years after the latest cover asset maturity date Distinct rules for pro-rata repayment before extended maturity date 	
Holders option	Resolution of covered bondholders with 2/3 majority to sell the separate bankruptcy asset pool to another bank	Resolution of covered bondholders with 2/3 majority	<ol style="list-style-type: none"> to disapply maturity extension or to sell cover assets to another bank or non-bank

Probability of default according to Moody's Idealised Cumulative Default Probabilities table:

- Baa1: 5Y - 1.10%; 7Y - 1.67%; 10Y - 2.60%
- A3: 5Y - 0.73%; 7Y - 1.11%; 10Y - 1.80%

To ensure the safety of the Covered Bonds the Bank is obliged to perform the coverage test

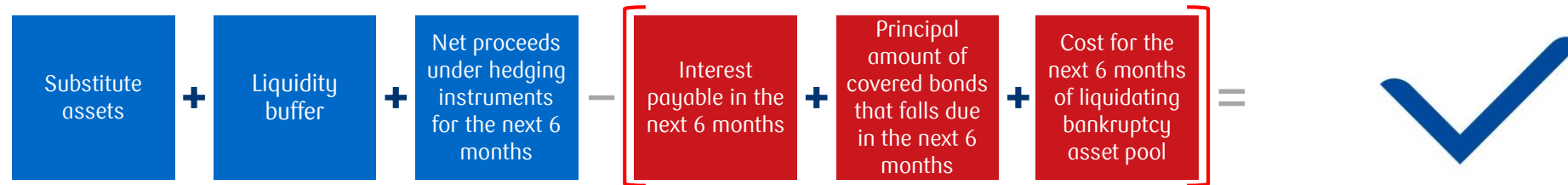


The coverage test:

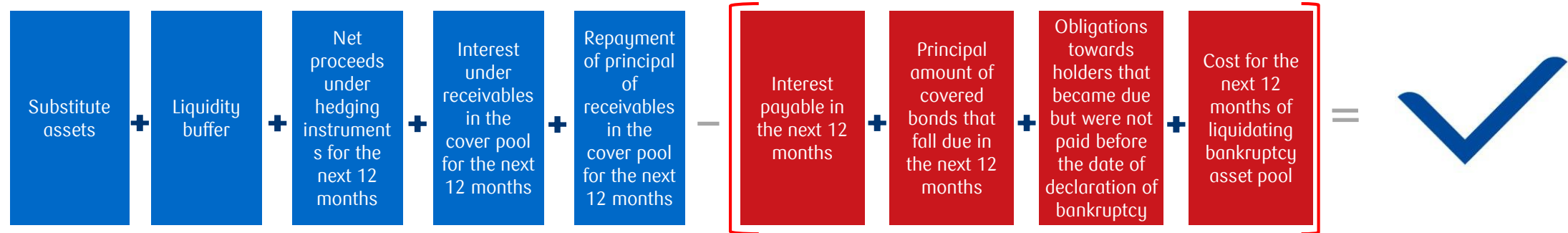
- verifies whether the value of assets in a cover pool allows for full satisfaction of all claims under outstanding covered bonds,
- must be performed every six months,
- is performed based on the following sets of data:
 - real data as of day of testing,
 - scenarios concerning changes of FX rates.

...and the liquidity test

6M



12M



The purpose of the liquidity test is to **verify that assets in a cover pool are sufficient for full satisfaction of all claims** under outstanding covered bonds, even if their maturity is extended in bankruptcy proceedings.

The liquidity test must be **performed at least every three months**.

The test is performed based on the following sets of data:

- real data as of day of testing,
- scenarios concerning changes of FX rates,
- scenarios concerning the shift of interest rate curves.

Polish banking sector - governmental borrowers' support



Due to significant increase in cost of debt for retail clients the government approved the measures to support retail mortgage borrowers. Three pillars of support were implemented in 2022 and will be prolonged for 2024 in an altered version:



Borrowers Support Fund

- The Fund was established in 2015 to support borrowers in difficult situation. In 2022 decision was made to increase the fund from PLN 0.6 bn to PLN 2 bn. Funding comes from banks. The amendments do not have a material impact on the Bank's financial position.



Credit reference rate

- The new PLN RFR benchmark WIRON will be replacing Wibor (the main reference rate in PLN). The transition is expected to be finalized till the end of 2027.
- Some products based on WIRON, including mortgages, were implemented by banks on voluntary basis already in 2023 and more will come in 2024.



Credit holidays

- There is a new project of credit holidays in the Polish Parliament. Loan payment moratoria will be most likely implemented in 2024 to borrowers who finance their own housing needs and in case when the monthly loan installment is at least 30% of the family income. One loan installment per quarter in 2024 will be probably subject to moratoria. Moratoria will be voluntary for the borrowers.

Impact of Credit holidays on the results of PKO Bank Hipoteczny

- Suspensions of repayment of principal and interest installments require the recalculation of future flows.
- Credit holidays, if implemented in 2024, will adversely effect profitability of the Bank as well as capital ratios of PKO Bank Hipoteczny.
- Suspension of payments under the mortgage loans will adversely impact applicable interest coverage limits, however due to OC at 56% (at the end of December 2023) and available liquidity, which Bank may draw from credit lines, the quality of the cover pool remains solid.

Experienced management team



**Katarzyna
Kurkowska-
Szczechowicz**

President of the Management Board

graduate of the Faculty of Economics at the Warsaw School of Economics, majoring in Finance and Banking, and a master's degree in law from the Faculty of Law and Administration at the University of Warsaw.

Responsible for internal audit, HR, legal and compliance departments.

Piotr Jaworski

Vice President of the Management Board

graduate of the Faculty of Management as well as Accounting and Finance at the University of Warsaw. He has 15 years of professional experience gained in investment banking and on the financial market. He holds a PhD degree in economics. He is licensed as an Investment Advisor and a Certified International Investment Analyst. Responsible for treasury department, products and IT.

Piotr Kochanek

Vice President of the Management Board

graduate of the Faculty of Mathematics of the Silesian University of Technology. Since 2014, he has been associated with PKO Bank Hipoteczny as Head of the Risk Department. Responsible for risk and credit departments.

Thank you

Contact

Piotr Jaworski – Vice President of the Management Board
15 Puławska Str.
02-515 Warsaw

e-mail: IR.pko.bh@pkobh.pl

www.pkobh.pl/relacje-inwestorskie



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